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United Technologies

Technology that saves lives

Submittal Guide

VM Series

Networked intelligent life safety with voice audio

Kidde
VM SERIES

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Project: _____

Contact: _____

Date: _____

Thank you for giving us the opportunity to provide this submittal for a VM Series Life Safety System. VM Series represents some of the most technologically advanced innovations the life safety industry has ever seen – innovations that will make your building and its occupants safe.

This guide provides a summary of these innovations and includes a comprehensive presentation of related system components and devices. Products we are submitting for your consideration are indicated by a checkmark in the margins of the pages that follow.

More detailed information can be found in individual data sheets dedicated to each product. All these sheets, along with guide specifications and other useful product information, are available electronically on our VitalSigns CD-ROM. This exhaustive collection of life safety related literature is fully searchable.

Thank you for giving us the opportunity to provide this submittal. Please do not hesitate to contact us should you require further information.

_____

Submittal Guide

VM Series

Networked intelligent life safety with voice audio

Kidde
United Technologies

VM Series Submittal Guide
Networked intelligent control with audio

VM Series represents the latest generation of life safety control panels for mid to large sized applications. With large multi-message displays, intuitive interfaces, and stylish contoured cabinets — these systems capture the imagination, and catch the eye. But behind the LCD display is where they really shine.

New TCP/IP-enabled microprocessors and chipsets take full advantage of the latest advances in computing technology, leading to smarter, faster, higher-capacity processing and more efficient designs. VM Series's patented Voltage Boost™ technology, for example, delivers constant voltage on NAC and AUX circuits – even at low battery power – resulting in lighter cable requirements and longer runs. That saves time and money.

VM Series Head End

Initiating Devices

Notification Appliances

Hazardous Location Devices

Door Holders & Relays

VM Series Head End

VM Series delivers high performance features exactly where you need them because flexibility is where VM's leading edge computing power is put to best use. In fact, VM Series can handle jobs that range from a single stand-alone control panel, to a sophisticated network comprising as many as 24 control panels processing data from up to 24,000 devices. Optional voice evacuation bridges the gap left by other mid-range systems, and makes these panels a cost-effective solution for most applications.

Networking at the speed of light

Networking is among VM Series' strong suits. A simple VM network can comprise up to 24 panels – enough to serve the needs of most campuses and larger buildings. Highly efficient RS485 connectivity, plus fiber-optic communications deliver faster response times and more sophisticated diagnostic capabilities, while cost-effective remote annunciation solutions keep basic monitoring and control always within reach.

Audio that speaks for itself

VM Series features three channels of integrated digital audio with up to two minutes of on-board programmable message storage. Its optional paging control center includes a high quality paging microphone to which can be added a firefighters' telephone. Auxiliary inputs are available for mass notification operations and connection to external systems.

An optional paging microphone provides local, as well as remote, audio functions.

Perfect for retrofits

VM Series is particularly well-suited to retrofit applications. All connections are made over standard wiring – no shielded cable required. This means that in most situations existing wiring can be used to upgrade a legacy control panel to VM Series technology without the expense or disruption of rewiring the entire building.

Power that goes the distance

Patented Voltage Boost™ technology delivers a constant 22.5 V on NAC and AUX circuits – even at low battery power. This means lighter gauge cable can be used for equivalent distances compared with conventional power supplies, or longer wire runs on the same gauge cable. Either way, this breakthrough technology saves time and equipment costs, making VM not only a high-performance solution — but a cost-effective one as well.

Tuned up and in synch

VM's four on-board Notification Appliance Circuits are fully synchronized to UL 1971 standards — without the need for external modules or other electronics. It's ample 10-amp power supply is finely tuned to get the most out of Kidde' widely-acclaimed low profile Genesis notification appliances.

The smart choice

Electronic addressing eliminates the tedium of setting dip-switches, and automatic device mapping ensures that each device resides on the system at its correct location. Meanwhile, innovative programming features allow the system designer to customize powerful built-in features to precisely suit the needs of the building owner.

Economical annunciation

Up to 30 R-Series LCD, LED annunciators and driver interface cards may be configured for each control panel on the VM Series network. Compatible annunciators include a range of LED and LCD models that provide zone or point annunciation, as well as common control capabilities. VM Series also supports graphic annunciation with optional graphic annunciator interface modules. Each interface provides common control, indicators, and 32 LEDs. Expansion units provide 48 led outputs.
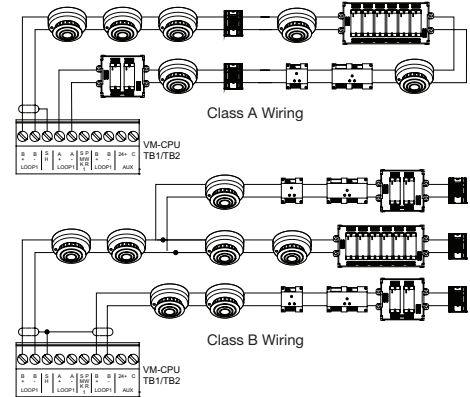
Up to 30 R-Series annunciators may be configured for each panel on the VM Series network.

VM Series
Head End

Initiating
Devices

Notification
Appliances

Hazardous Location
Devices

Door Holders
& Relays

1

System Layout and Wiring

Up to Four Intelligent Analog Loops.

| SLC1 Standard | SLC2 Optional | SLC3 Optional | SLC4 Optional |

Four 3-amp Class B or Class A NACs.

| NAC 1 | NAC 2 | NAC 3 | NAC 4 |

Three Channels Digital Voice Audio.

| CH 1 | CH 2 | CH 3 |

30 Class B or Class A Annunciators. 4,000 ft. max.

Three Control/ Display Modules

RS-232

Relays: 3 Form C

Aux. Power: 24 VDC, 1.0 A total

Dual Line Dialer

Ethernet Interface

Copper or fiber interface

Central Station

Ethernet

VM Network... up to 24 panels

Programming and Diagnostics

FireWorks Graphical Interface

■ **Signaling Line Circuit**

Class A Wiring

VM-CPU TB1/TB2

Class B Wiring

VM-CPU TB1/TB2

■ **Notification Appliance Circuits**

PS10-4B Power Supply TB2

Normal/ Supervised   Active/ Supervised

15 kΩ EOLR
15 kΩ EOLR
15 kΩ EOLR
15 kΩ EOLR

■ **Digital Audio Riser**

Panel 1   Panel 2   Panel x

VM-CPU TB5

VM-PMI EAEC

Class A Wiring

■ **RS-485 bus wiring for remote annunciators**

VM-CPU TB5

Class A Wiring

■ **RS-232 wiring**

Supervised Printer, RS-232 wiring   Unsupervised Printer, RS-232 wiring

VM-CPU TB5

RX
Common
DTR

VM-CPU

TX
RX
Common

■ **Common relays**

EOLR

EOLR   EOLR

VM-CPU TB4

TROUBLE   ALARM   SUP

VM-CPU TB4

1. Trouble circuit
2. Alarm circuit
3. Supervisory circuit
4. External trouble input circuit
5. External alarm input circuit
6. External supervisory input circuit

VM SERIES
Head End

VM Series
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Assembly

VM Series systems are designed for quick assembly and easy access in the field. Components are modular and require no special tools to service or replace.

- CAB6 Backbox
- PS10-4B insulator plate
- PS10-4B power supply
- VM-ELEC Chassis Electronics Assembly
- VM-CPU main board
- VM-LCD user interface
- Mounting frame
- Filler plates
- VMD Door (silver or red)

Dimensions

The backbox is designed for semiflush or surface mounting. Conduit and nail knockouts, keyhole style mounting holes, and wide wiring troughs facilitate efficiency during installation.

in (cm)

Top View
Side view
Bottom view
Side view

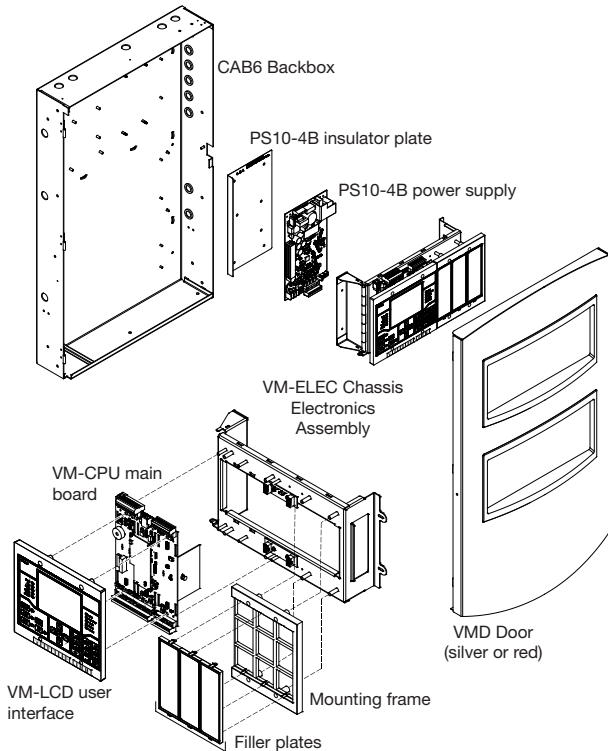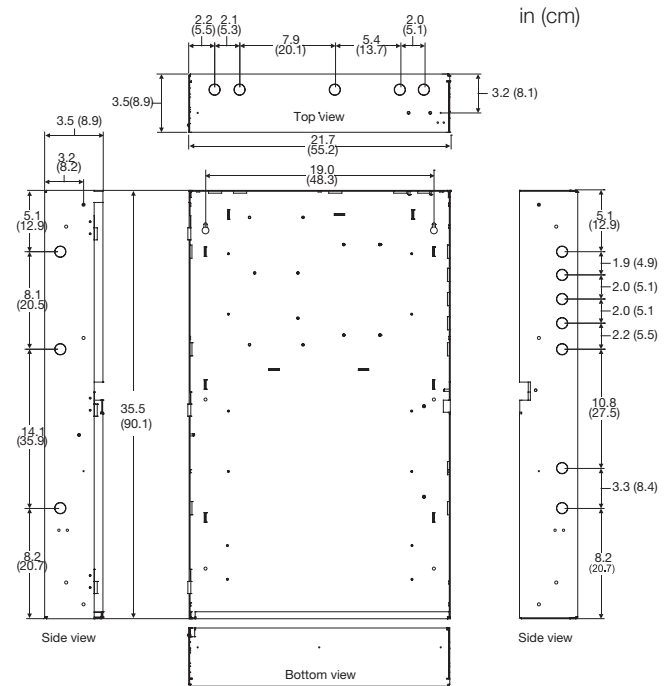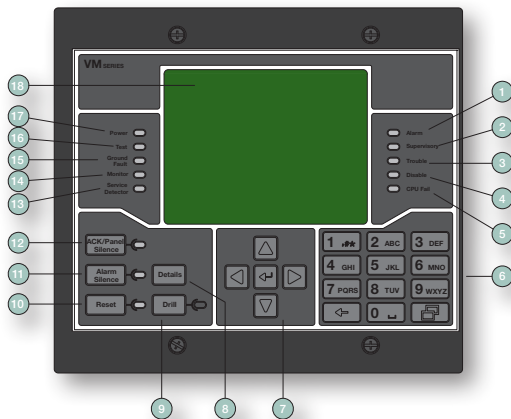**Note:** Add 0.25 in (0.64 cm). to height and width dimensions to allow for knockouts when framing in the backbox for semiflush mounting.

Operation

1	Alarm	Flashing indicates new alarm events. On indicates all alarm events have been acknowledged.
2	Supervisory	Flashing indicates new supervisory events On indicates all supervisory events have been acknowledged.
3	Trouble	Flashing indicates new trouble events. Steady indicates all trouble events have been acknowledged.
4	Disable	Indicates a system component has been disabled.

5	CPU Fail LED	Indicates a CPU process failure.
6	Keypad	Includes alphanumeric keys, backspace key, menu key.
7	Cursor controls	Includes up, down, left, and right arrow keys, Enter key.
8	Details	Displays additional information on the selected event.
9	Drill	Activates audible alarm signals and, if configured, visible alarm signals. The LED indicates that Drill operation is active.
10	Reset	Resets the fire alarm system. The LED indicates the panel is resetting.
11	Alarm Silencebutton/ LED	Silences alarm signals. The LED indicates that Alarm Silence is active.
12	ACK/Panel Silence	Silences the panel buzzer and acknowledges all new events. The LED indicates that Panel Silence is active.
13	Service Detector	Indicates a detector needs servicing
14	Monitor	Flashing indicates new monitor events. On: Indicates all monitor events have been acknowledged.
15	Ground Fault	Indicates a system ground fault.
16	Test	Indicates system components are being tested.
17	Power	On indicates the panel is using primary power. Off iIndicates the panel (or another panel on the network) is using battery power.
18	LCD	Displays system status, event messages, reports, and operator menus.

Control Panels

VM Series control panels come complete with user interface, CPU, one addressable loop, four Class B NACs, Universal 110/220v 10 Amp power supply. Order VM-SLC separately for a second signaling line circuit (SLC). Order VM-SLCXB for a third SLC, add a VM-SLC to the VM-SLCXB for a fourth SLC.
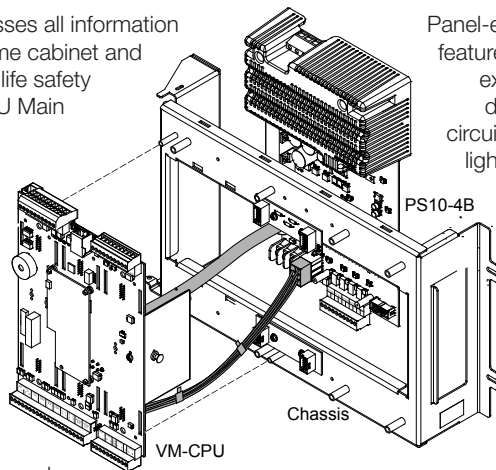
Model	Door Color	Language	
VM-1R	Red	English	Data Sheet K85005-0133
VM-1S	Silver	English	Data Sheet K85005-0133

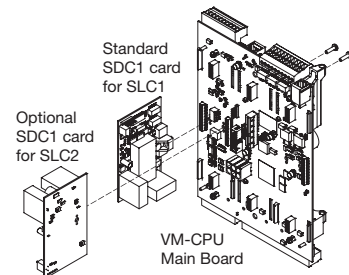# Standard Equipment

VM-CPU Main Board

The VM-CPU Main Board processes all information from modules installed in the same cabinet and from other control panels on the life safety network. In addition, the VM-CPU Main Board provides:

- Identification of hardware and software faults, and ground fault detection

- Common alarm, common trouble, and common supervisory relay outputs

- One signaling line circuit (SLC), with the option of adding a VM-SLC card to provide a second SLC

- An Ethernet connection for panel programming and diagnostics (requires an optional VM-ETH1 card)

- Connections for network data and digital audio riser (requires an optional VM-NOC or VM-NOCF card)

- Connections for R-Series remote annunciators

PS10-4B Power Supply Card

Panel-equipped PS10-4B 10 amp power supplies feature universal 94 to 264 Vac input voltage and exclusive Voltage Boost™ technology, which delivers a constant 22.5 V on NAC and AUX circuits – even at low battery power. This means lighter gauge cable can be used for equivalent distances compared with conventional power supplies, or longer wire runs on the same gauge cable. In addition it provides the required power and related supervision functions for the control panel, as well as filtered, regulated power to the rail chassis modules and 24 VDC for operating ancillary equipment.

PS10-4B

VM-CPU

Chassis

Standard SDC1 card for SLC1

Optional SDC1 card for SLC2

VM-CPU Main Board

VM-SLC Signaling Line Circuit Card and VM-SLCXB Signaling Line Loop Expansion Card

The VM-SLC Signaling Line Circuit Card provides one Class B or Class A signaling line circuit loop on a VM-CPU main board that supports up to 125 detector and 125 module addresses. The card also provides resettable 24 VDC for powering conventional two-wire smoke detector circuits on GSA-Series modules.

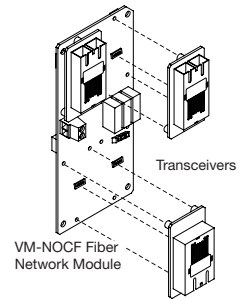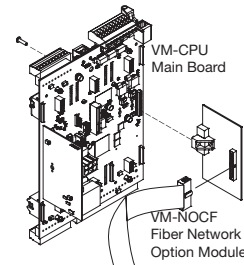| VM-SLCXB	Signaling Line Loop Controller Expansion Card	Data Sheet K85005-0133

Network Options

Fiber Optic Transceivers

Fiber Optic Transceivers are used with a fiber optic network module to provide transmission and reception capability over fiber optic cable for fire control panels. Class B and Class A configurations are supported.

Transceivers

VM-NOCF Fiber Network Module

SMXLO2	Standard output single-mode for up to 8.7 mi. (14 km) node-to-node.	Data Sheet K85005-0133
SMXHI2	High output single-mode for up to 24.85 mi. (40 km) node-to-node.	Data Sheet K85005-0133
MMXVR	Standard output multimode for up to 8,000 ft. (2.4 km) node-to-node.	Data Sheet K85005-0133

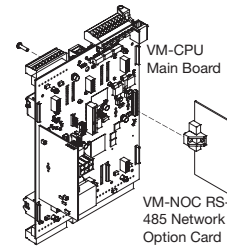## VM-NOCF Fiber Network Option Module

The VM-NOCF Fiber Network Option Module provides a fiber optic, or combination fiber optic and RS-485 communication path, for VM-1 control panels.

VM-CPU Main Board

VM-NOCF Fiber Network Option Module

VM-NOCF	Fiber Network Option Module. Uses MMXVR, SMXH2, SMXLO.	Data Sheet K85005-0133

VM-NOC RS-485 Network Option Card

The VM-NOC RS-485 Network Option Card is used to connect up to eight VM-1 panels. The card enables two independent RS-485 circuits for network data and digital audio communications. Class B and Class A wiring is supported.

VM-CPU Main Board

VM-NOC RS-485 Network Option Card

VM-NOC	Network Option Card, RS485, Class B or Class A wiring.	Data Sheet K85005-0133

Audio Options

VM-PMI Paging Microphone Interface

The VM-PMI Paging Microphone Interface provides controls for emergency voice/alarm communication and two-way firefighters' telephone communication. The VM-PMI consists of an audio mounting bracket, EAEC Emergency Audio Evacuation Controller card, enclosure, and paging microphone.

VM-PMI	Audio Control & Paging Interface.	Data Sheet K85005-0133

VM-MFK Master Firefighters' Telephone

VM-MFK Master Firefighters' Telephones add two-way firefighters' telephone capability to a VM-PMI Paging Microphone Interface. The VM-MFK mounts to the VM-PMI. Together they comprise the fire command center.

VM-MFK	Master Firefighters' Telephone Kit.	Data Sheet K85005-0133

Initiating Devices

Notification Appliances

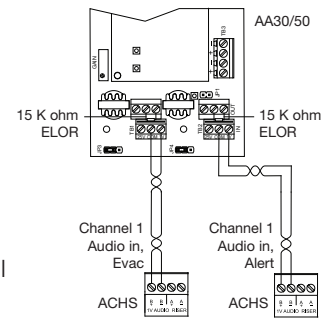Hazardous Location Devices

Door Holders & Relays

VM Remote Microphone

VM Remote Microphones provide remote paging capability throughout a building or campus. Each remote microphone has two inputs for connecting other remote microphone units. The paging circuit supports up to 63 interconnected remote paging stations.

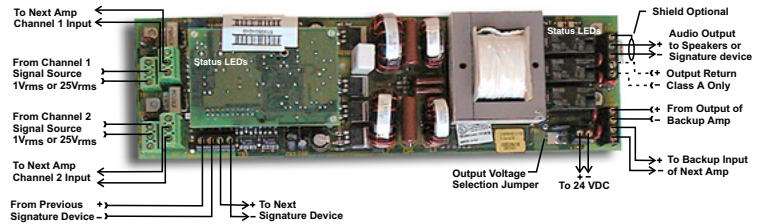|		
VM-ARM	Remote Microphone, includes cabinet, semi-flush mount.	Data Sheet K85005-0133
VM-ARM-S	Remote Microphone, includes cabinet, surface mount.	Data Sheet K85005-0133

ACHS Audio Channel Selector Card

The ACHS Audio Channel Selector Card converts digital audio from an EAEC card into an analog preamp signal. Up to three ACHS cards may be mounted to a VM-PMI Paging Microphone Interface or AMK-RN Mounting Kit.

ACHS	Audio Channel Selector, one channel, supervised preamp output.	Data Sheet K85005-0133
AMK-RN	Mounting Kit. Holds up to three ACHS cards where no VM-PMI is used.	Data Sheet K85005-0133

Intelligent Audio Amplifiers

Signature Series amplifiers are high-efficiency switch mode audio amplifiers available in 30 and 50 watt sizes. Amplifiers have two input channels supporting dual channel or single channel audio applications. Signature amplifiers are ideally suited for distributed audio applications and small centrally banked applications. The audio output is configurable as 25V$_{RMS}$ or 70V$_{RMS}$ in Class B or Class A wiring configurations. Speakers can connect directly to the output of the amplifier or the amplifier output can run as an audio riser to Signature modules where speaker zone selection is made. Each amplifier has a built-in 1kHz tone generator and provision for a back up amplifier. On-board status LEDs provide quick visual indication of amplifier status.
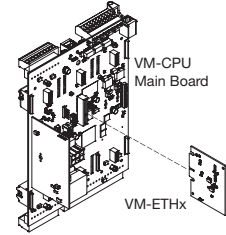
SIGA-AA30	30 Watt Intelligent Audio Amplifier	Data Sheet K85010-0089
SIGA-AA50	50 Watt Intelligent Audio Amplifier	Data Sheet K85010-0089

Option Cards

Ethernet Adapter Cards

The VM-CPU supports one of the following three adapter cards...

VM-CPU
Main Board

VM-ETHx

VM-ETH1 Ethernet Adapter Card

The VM-ETH1 adapter card provides a standard 10/100 Base-T Ethernet network connection for panel programming and diagnostics.

| VM-ETH1 | Ethernet Adapter for programming and diagnostics remotely. | Data Sheet K85005-0133 |

VM-ETH2 Ethernet Adapter Card

The VN-ETH2 adapter card provides all the function of the VM-ETH1 plus the added capability of communicating to compatible digital alarm receivers. Please refer to the VM UL Compatibility List for the latest compatible receivers.

| VM-ETH2 | Ethernet Adapter for Digital Alarm Recievers, programming, and diagnostics. | Data Sheet K85005-0133 |

VM-ETH3 Ethernet Adapter Card

The VM-ETH3 adapter card provides all the function of the VM-ETH2 plus the added capability of sending email messages as well as SMS text messages by means of email-to-text.
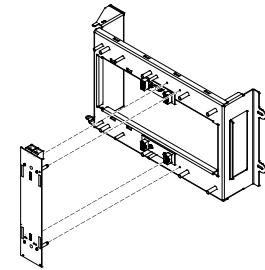
| VM-ETH3 | Ethernet Adapter for email, Digital Alarm Recievers, programming, and diagnostics. | Data Sheet K85005-0133 |

VM-DACT Dual Line Dialer Card

The VM-DACT Dual Line Dialer Card provides dialer communications between the VM-1 control panel and remote locations over telephone lines. Alarm, supervisory, and trouble information is transmitted to the remote site using one or two telephone lines in dual or split format to any desired receiver.
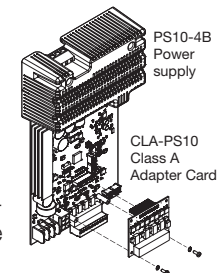
| VM-DACT | Dialer, dual line | Data Sheet K85005-0133 |

CLA-PS10 Class A Adapter Card

PS10-4B
Power
supply

CLA-PS10
Class A
Adapter Card

The CLA-PS10 Class A Adapter Card converts the four Class B notification appliance/auxiliary power circuits on the PS10-4B power supply card to Class A. For notification appliance circuits only.
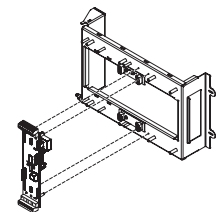
| CLA-PS10 | Class A Adapter, PS10 NACs. | Data Sheet K85005-0133 |

VM-SLCXB Signaling Line Loop Expansion Card

The VM-SLCXB Signaling Line Loop Controller Expansion Card provides up to two Class A or Class B data circuits for V-Series detectors and GSA modules. The VM-SLCXB includes one pre-installed VM-SLC signaling line circuit card. A second VM-SLC card (ordered separately) can be added to provide an additional device loop.

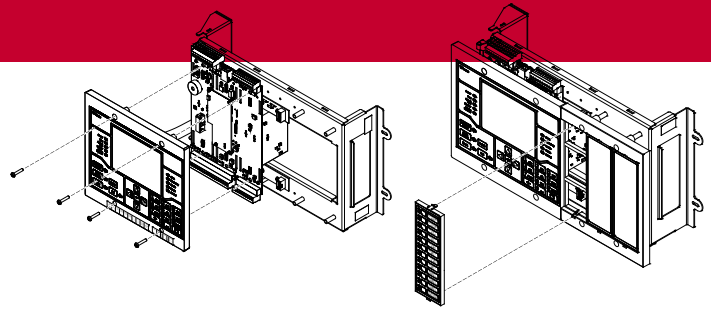| VM-SLCXB | Signaling Line Loop Controller Expansion Card. | Data Sheet K85005-0133 |
| VM-SLC | Signaling Line Circuit Card. | Data Sheet K85005-0133 |
| VM-SLC-HC | High Capacity SLC Card for circuits with more than 90 isolators. | Data Sheet K85005-0133 |

SUBMIT ☑

VM Series
Head End

Initiating
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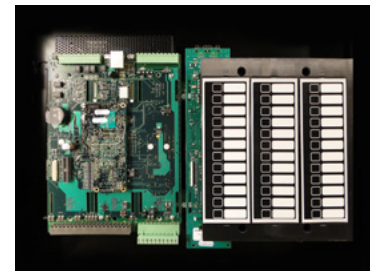Hazardous Location
Devices

Door Holders
& Relays

SUBMIT ✔

Control, Display & Annunciation

VM Series features an extra-large backlit display with a full 24-line by 40 character screen capable of showing eight simultaneous events without the need from scrolling. Up to three switch/LED strips may be added, with control operations and multi-colored LED behavior controlled by software. Customizable inserts provide plenty of room for meaningful labels, while large tactile control buttons instill confidence and promote quick response when time is of the essence. The main display mounts to the CPU. Control/display modules attach to a convenient mounting frame.

Control Display Modules

VM Control Display Modules provide additional operator interface capability. The module consists of 12 groups of two LED-switches arranged as a quad-color LED that is software programmable to amber, red, blue, or green, and a single-color amber LED.

| D12LS-VM | Control/Indicating Display Strip, 12 groups: two LEDs with switch. | Data Sheet K85005-0133 |

FireWorks Graphical Annunciation Interface

The FireWorks Graphical Annunciation Interface is a software platform that provides end users with clear, concise, and coordinated site incident information. FireWorks also supports optional text-based web clients to provide remote status updates. Five configurable graphical viewports offer simultaneous insight into different aspects of an incident, while the underlying software dynamically manages content in each viewport based on real-time events and user interaction. Facility maps, embedded HTML viewer, and live event flow from vital equipment all come together instantly within view of an operator facing events that require solid information and split-second timing.
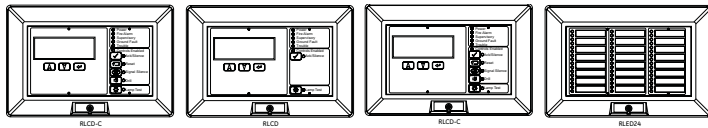
FW-CGSVM	FireWorks Graphics Software. Fiveviewport display. No common control.	Data Sheet K85005-0068
FW-IPMON1000	IP Monitoring, 1000 connections. Requires FW-DARCOM.	Data Sheet K85005-0068
FW-DARCOM	For Communication to DACRs and/or IPMON1000.	Data Sheet K85005-0068

LED-based Graphic Annunciation

The GCI series of graphic annunciator drivers allow the VM control panel to display events on an LED-based graphic annunciator. The GCI annunciator card supports 32 LEDs on the graphic panel display. It includes status LEDs and an internal buzzer. The graphic card is supplied with snap track mounting. It is attached to a plastic mounting rail that requires two EIA panels. The annunciator communicates with the control panel on the RS 485 data riser, which can be configured for Class A or Class B communication. Always ensure that National and Local approvals and requirements are met when selecting a graphic panel supplier.

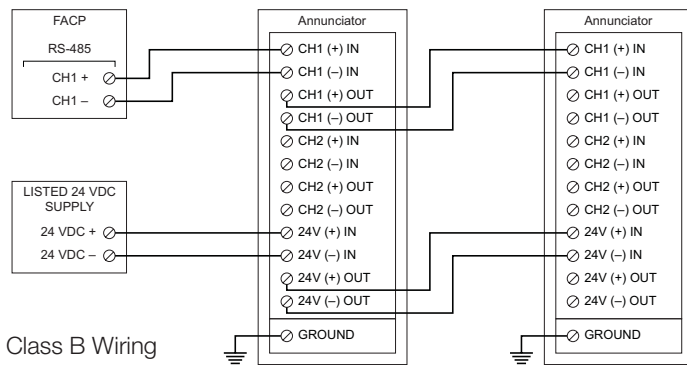| GCI | Graphic Annunciator Driver. | Data Sheet K85005-0133 |
| GCIX | Graphic Annunciator Driver Expander. Outputs for 48 LEDs, 24 switch inputs. | Data Sheet K85005-0133 |

VM SERIES

Head End

VM Series
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SUBMIT

R-Series Annunciators

Class B Wiring

Each VM Series node can accommodate up to 30 R-Series and graphic annunciators. R-Series Annunciators are high-performance devices that offers LCD or LED annunciation. Models are available with and without common controls.

R-Series annunciators and expanders are mounted on a standard 4-inch square electrical box, using the included mounting ring. They can also be surface mounted in locking steel enclosures. Three different enclosures are available.

A keyswitch and graphic annunciator interface is available for R-Series annunciator applications. The keyswitch enables or disables common controls. The graphic annunicator interface card supports 32 LEDs and 16 switches on the graphic panel display, with expander additional 48 LEDs and 12 switches.

Remote Annunciators

RLCD	LCD text annunciator without common controls. English.	Data Sheet K85005-0128
RLCD-R	LCD text annunciator without common controls. English. Red.	Data Sheet K85005-0128
RLCDF	LCD text annunciator without common controls. French.	Data Sheet K85005-0128
RLCD-C	LCD text annunciator with common controls. English.	Data Sheet K85005-0128
RLCD-CR	LCD text annunciator with common controls. English. Red.	Data Sheet K85005-0128
RLCD-CF	LCD text annunciator with common controls. French.	Data Sheet K85005-0128
RLED-C	16-pair LED zone annunciator with common controls. English.	Data Sheet K85005-0128
RLED-CR	16-pair LED zone annunciator with common controls. English. Red.	Data Sheet K85005-0128
RLED-CF	16-pair LED zone annunciator with common controls. French.	Data Sheet K85005-0128

Remote Expanders

RLED24	24-pair LED zone expander with expander cable and zone card insert.	Data Sheet K85005-0128
RLED24R	24-pair LED zone expander with expander cable and zone card insert. Red.	Data Sheet K85005-0128

Enclosures

RA-ENC1	One-position enclosure for Remote Annunciator.	Data Sheet K85005-0128
RA-ENC2	Two-position enclosure for Remote Annunciator and one Remote Expander.	Data Sheet K85005-0128
RA-ENC3	Three-position enclosure for Remote Annunciator and two Remote Expanders.	Data Sheet K85005-0128
LSRA-SB	Surface Mount Box - for single R Series annunciator.	Data Sheet K85005-0128

Graphic Annunciator Driver

GCI	Graphic Annunciator Driver	Data Sheet K85005-0128
GCIX	Graphic Annunciator Expander - supports 48 LEDs and 12 switches.	Data Sheet K85005-0128

Accessories

RKEY	Remote key switch on plate for enabling or disabling common controls.	Data Sheet K85005-0128
27193-16	Electrical box, surface mount, white, single-gang, for RKEY.	Data Sheet K85005-0128

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VM SERIES

Head End

Side tab.

SUBMIT

VM Series
Head End

Power Supplies

Remote Booster Power Supply

The Remote Booster Power Supply is a self-contained 24 Vdc power supply designed to augment fire alarm audible and visual power requirements as well as provide power for auxiliary, access control and security applications. The booster contains all of the necessary circuits to monitor and charge batteries, control and supervise four Class B or two Class A NAC circuits and monitor two controlling inputs from external sources. It also provides the ability to synchronize Genesis series strobes to UL 1971 requirements, and offers independent horn control over two wires.

For comprehensive configuration and wiring details, refer to the BPS Application Guide, 85001-0582.

MIRBPS6A	6.5 Amp Booster Power Supply	Data Sheet K85005-0125
MIRBPS6A/230	6.5 Amp Booster Power Supply (220V)	Data Sheet K85005-0125
MIRBPS10A	10 Amp Booster Power Supply	Data Sheet K85005-0125
MIRBPS10A/230	10 Amp Booster Power Supply (220V)	Data Sheet K85005-0125
3-TAMP	Tamper switch	Data Sheet K85005-0125

Auxiliary Power Supplies

The Auxiliary Power Supply offers the same advantages as the BPS above, but is supplied with its own extra large enclosure providing space for up to two 24 Ah batteries and additional option modules in a number of mounting configurations. Option modules can be installed on the mounting brackets inside the enclosure or on an MP2L mounting plate at the top of the enclosure. These include the GSA-REL releasing module, O2/6/6R module motherboards, as well as SIGA-AA30 and –AA50 amplifiers.

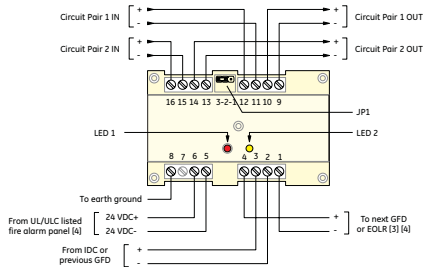| APS6A | 6.5 Amp Auxiliary Power Supply | Data Sheet K85005-0127 | ☐ |
APS6A/230	6.5 Amp Auxiliary Power Supply (220V)	Data Sheet K85005-0127	☐
APS10A	10 Amp Auxiliary Power Supply	Data Sheet K85005-0127	☐
APS10A/230	10 Amp Auxiliary Power Supply (220V)	Data Sheet K85005-0127	☐

Batteries and Battery Cabinets
Data Sheet K85010-0127

12 Volt Batteries	☐ 12V24A (26 Ah) ☐ 12V6A5 (7.2 Ah)	☐ 12V40A (40 Ah) ☐ 12V10A (11 Ah)	☐ 12V50A (50 Ah) ☐ 12V17A (18 Ah)	☐ 12V65A (65 Ah)	☐
6 Volt Batteries	☐ 6V8A (8 Ah)	☐ 6V10A (12 Ah)			☐
Battery Cabinets	☐ BC-1 (holds up to two 40 Ah batteries) ☐ 3-RCC7R (holds up to two 65 Ah batteries)		☐ BC-2 (holds up to two 17 Ah batteries)		☐

Accessories

Ground Fault Detection Module

The GFD module is designed to detect ground fault conditions on either of two independent power or data circuits. Each circuit must be balanced with respect to ground. The module will detect when the resistance between any of the monitored conductors and earth ground drops below 10 K Ohms. Two LEDs are provided to indicate the conductor with the ground condition. A normally energized Trouble/Ground Fault relay is provided with NO/NC relay contacts for interfacing with monitoring systems.

GFD	Ground Fault Detection Module	Data Sheet K85010-0115

CDR-3 Coder

The CDR-3 Coder is an auxiliary circuit option module that provides two audio outputs, March Time and PSNI, (Positive, successive, non-interfering). Dry relay contacts are provided for PSNI code, march time and duration. For the PSNI code, the RS-232C input provides communications, between VM Series's RS-232 communications card and the CDR-3.

CDR-3	PSNI Coder Module	Data Sheet: K85003-02709

V-Series

Analog Addressable Initiating Devices

Kidde Kidde brand analog addressable detectors are meticulously engineered to deliver high-performance features, superb reliability, and unbeatable quality. With their highly stable design, these detectors resist air movement caused by heating and air conditioning, making them reliable performers ideally suited to modern building interiors.

The installation and maintenance advantages of Kidde brand analog addressable detectors add value throughout their service life. The twist-and-lock design makes short work of installation and maintenance operations. A plastic breakout on the detector housing optionally prevents removal from the base except with a special tool.

A bright, easy-to-see LED flashes red when the detector is in alarm, thus eliminating much of the guesswork when responding to front-panel indications.

VM Series Device loop

V-Series control panels provide one device loop circuit that supports 125 detectors and 125 module addresses. The VM panel may support a second, third or fourth loop by means of the appropriate number of VM-SLC loop expansion modules and VM-SLCXB expander modules. All loop circuits are supervised for opens, shorts, and grounds.

Typical Wiring

Class A Wiring

Class B Wiring

All detectors feature comprehensive self-diagnostic capability. V-PS and V-PHS optical detectors continuously adjust their sensitivity to compensate for changes in the environment such as the presence of dirt, smoke, temperature, and humidity. These detectors issue a dirty sensor warning when they reach their preset limit.

The V-PCOS detector, with its on-board CO sensor, pulls double-duty — continuously monitoring the environment for signs of smoke, as well as its invisible yet deadly companion, carbon monoxide.
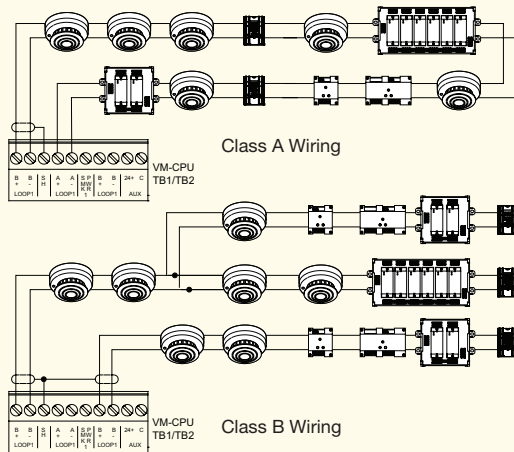
Standard Features

- Optical, heat, and multisensor models available

- Compatible standard, relay, isolator, and audible bases

- Field replaceable optical chamber

- Electronic Addressing including mapping location

- Bases mount to standard North American two-gang or 4" square electrical boxes

- Dual color LED provides at-a-glance alarm indication

- Tamper-resistant feature

- Self diagnostic capability with on-board storage of results

- Optical detectors feature automatic rate compensated sensitivity adjustment, as well as dirty sensor warnings

- Manufactured to strict international ISO 9001 standards

- Assembled using surface mount technology for RF resistance

- Conformally coated components resist dust and humidity

- Automatic detector test

- Low Profile Design

Initiating Devices

Notification Appliances

Hazardous Location Devices

Door Holders & Relays

VM Series
Head End

Initiating
Devices

V-Series Detectors

Optical and combination detectors

V-Series optical detectors continuously adjust their sensitivity based on fluctuating environmental conditions such as the presence of dirt, smoke, humidity, or changes in temperature, and notifies the panel of any changes in sensor sensitivity. When the detector has adjusted its sensitivity to its maximum limit, it issues a dirty sensor warning, allowing enough of a margin for maintenance personnel to clean the detector before it goes into trouble condition. These detectors perform comprehensive self-diagnostics and store these details in their on-board memory.

Optical/Fixed Temperature Detector

V-PHS Optical/Fixed Temperature Detector houses an optical sensing chamber that detects smoke, as well as a fixed-temperature sensor that detects heat. The detector analyzes data from both sensors to determine when an alarm is initiated. This combines the suitability of optical sensing for slow burning fires with the sensitivity of fixed-temperature detection for fast flaming fires to arrive at a solution that responds reliably to the widest range of fire types. A sophisticated algorithm processes data from both sensors over time so that an alarm is only reported when conditions precisely match the signature of a fire. This eliminates the shortcomings of single-sensor optical and heat detection, and significantly reduces the risk of nuisance alarms.

| ☐ | V-PHS | Analog Addressable Optical/Fixed Temperature Detector | Data Sheet K85001-0592 |

Optical Smoke Detector

V-PS Optical Smoke Detector uses an optical sensing chamber to detect smoke. The detector analyzes data gathered by the sensor to determine when an alarm is initiated. Thanks to its high-performance optical sensing chamber, the V-PS responds quickly and reliably to a wide range of fire types, especially slow burning fires fuelled by combustibles typically found in modern multi-use buildings. The V-PS detects extremely small particles and triggers an alarm at the first sign of smoke.

| ☐ | V-PS | Analog Addressable Optical Smoke Detector | Data Sheet K85001-0592 |

Heat Detectors

Thanks to advanced thermistor technology, V-Series heat detectors are ideal for sensing fast, flaming fires and for applications where smoke detection is inappropriate. They are particularly well-suited to areas such as kitchens and shower rooms, where the ambient temperature is relatively constant, but where steam and smoke are present. These heat detectors are capable of performing comprehensive self-diagnostics and storing the results.

Rate-of-Rise Heat Detector

The V-HRD Rate-of-Rise Heat Detector provides a 15°F (8°C) per minute rate-of-rise heat sensor for the detection of heat due to fire. The heat sensor monitors the temperature of the air and determines whether an alarm should be initiated.

| ☐ | V-HRD | Analog Addressable Rate-of-Rise Heat Detector | Data Sheet K85001-0592 |

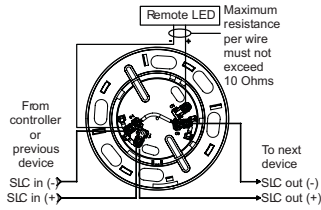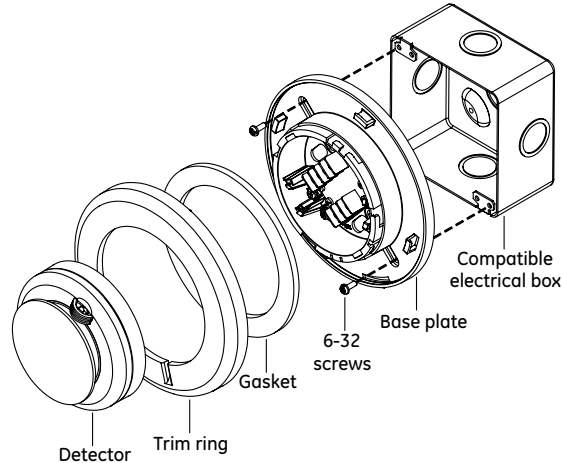## Fixed Temperature Heat Detector

V-HFD Fixed Temperature Heat Detector provides a 135°F (57°C) fixed-temperature heat sensor for the detection of heat due to fire. The heat sensor monitors the temperature of the air and determines whether an alarm should be initiated.

| ☐ | V-HFD | Analog Addressable Fixed Temperature Heat Detector | Data Sheet K85001-0592 |

SUBMIT ☑

V-Series Bases

Compatible electrical box

Base plate

6-32 screws

Gasket

Trim ring

Detector

Remote LED — Maximum resistance per wire must not exceed 10 Ohms

From controller or previous device
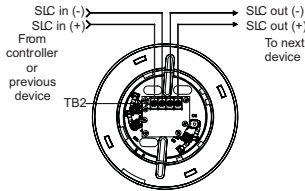
To next device

SLC in (-)
SLC in (+)

SLC out (-)
SLC out (+)

B4U Standard Base

The B4U Analog Standard Detector Base features twist-and-lock detector installation and is compatible with with V-Series analog detectors. The base does not require a separate address because it shares the address of the device it is connected to.
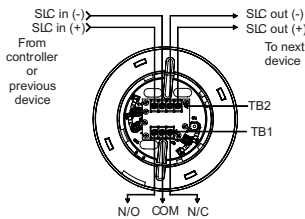
| B4U | Standard Base | Data Sheet K85001-0592 | ☐ |

SLC in (-)
SLC in (+)
From controller or previous device

SLC out (-)
SLC out (+)
To next device

TB2

IB4U Isolator Detector Base

The IB4U Analog Isolator Detector Base is designed to prevent an entire communications loop from being disabled when a short circuit occurs. This is accomplished by isolating the part of the loop containing the short from the remainder of the circuit. These bases automatically restore the entire loop when the cause of the short circuit is corrected.
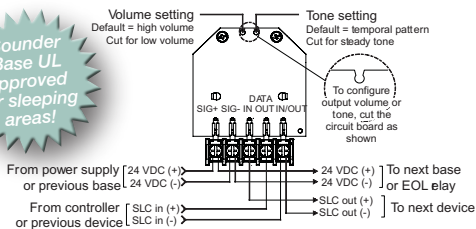
| IB4U | Isolator Detector Base | Data Sheet K85001-0592 | ☐ |

SLC in (-)
SLC in (+)
From controller or previous device

SLC out (-)
SLC out (+)
To next device

TB2
TB1

N/O COM N/C

RB4U Relay Detector Base

The RB4U Analog Relay Detector Base is designed to add relay functionality to the listed compatible detectors. Form C latching relay contacts are included for the control of appliances such as door closers, fans, dampers, etc.

| RB4U | Relay Detector Base | Data Sheet K85001-0592 | ☐ |

Sounder Base UL approved for sleeping areas!

Volume setting
Default = high volume
Cut for low volume

Tone setting
Default = temporal pattern
Cut for steady tone

To configure output volume or tone, cut the circuit board as shown

DATA
SIG+ SIG- IN OUT IN/OUT

From power supply or previous base
24 VDC (+)
24 VDC (-)

24 VDC (+)
24 VDC (-)
To next base or EOL elay

From controller or previous device
SLC in (+)
SLC in (-)

SLC out (+)
SLC out (-)
To next device

Audible (Sounder) Detector Bases for Intelligent Addressable Detectors

SB Sounder Bases add audible output functions to intelligent V Series detectors. Bases can operate as independent local alarms, or as part of a zone or system alarm with synchronized audible output. SB4U-LF is UL listed for sleeping areas and other applications requiring 520 Hz low frequency audible tones.

| SB4U-LF | Low Frequency Audible (Sounder) Base for Intelligent Detectors | Data Sheet K85001-0640 | ☐ |
| SB4U | Audible (Sounder) Base for Intelligent Detectors | Data Sheet K85001-0640 | ☐ |

Accessories

| AB4G-SB | Surface Box for Audible Base | Data Sheet K85001-0592 | ☐ |
| GSA-LED | Remote alarm LED, use with standard base only | Data Sheet K85001-0592 | ☐ |

SUBMIT ☑

With Replaceable CO sensor and smoke chamber!

CO and Fire Detection

Intelligent Photoelectric Detector with CO Sensor

The V-PCOS uses a photo-optical sensing chamber to detect smoke, and a high performance CO sensor to detect carbon monoxide. The detector analyzes the smoke and CO sensors independently to determine whether to initiate smoke/fire alarm, a CO-related life safely alarm, or both. The two elements can report separately to the system. The V-PCOS features a field-replaceable smoke chamber, and a field-replaceable CO sensor and daughterboard.

V-PCOS	Intelligent Photoelectric Detector with CO Sensor	Data Sheet K85001-0619
V-PCOS-CA	Intelligent Photoelectric Detector with CO Sensor (Canadian Market)	Data Sheet K85001-0619

Fire Detectors

Signature (GSA) Series fire detectors make the best of true multisensor capability by continually monitoring the environment with their on-board sensors, each of which is finely tuned to detect a different characteristic of combustion.
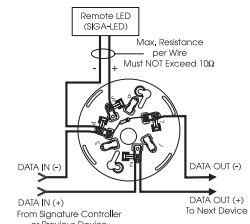
GSA-PS	Photo-optical Detector	Data Sheet K85001-0269
GSA-HFS	Fixed Temperature Heat Detector	Data Sheet K85001-0243
GSA-HRS	Combination Fixed Temperature/Rate-of-Rise Heat Detector	Data Sheet K85001-0243
GSA-IPHS	Combination Heat/Photo/Ion Detector	Data Sheet K85001-0245
GSA-IPHSB	Combination Heat/Photo/Ion Detector, Black	Data Sheet K85001-0245
GSA-PHS	Combination Heat/Photo Detector	Data Sheet K85001-0247

CO and Fire Detector Bases Compatible with V-PCOS and GSA Series detectors

Standard Detector Base

Standard detector bases provide roomside wiring terminals. They mount to North American one-gang box, 3½ or 4-inch octagon boxes, or 4-inch square electric box. Bases for 4-inch square boxes include a trim skirt to conceal the electric box and provide a finished appearance.
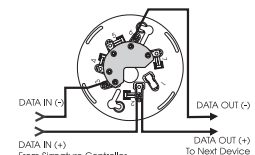
☐GSA-SB	☐GSA-SB4 (4" with trim skirt)	Standard Detector Base	Data Sheet K85001-0619

Isolator Detector Base

Isolator detector bases provide room-side wiring terminals and includes a built-in line fault isolator. Models with integral switches allow the detector to be removed from its base without causing the isolator to operate. Mounts to North American one-gang box, 3½ or 4-inch octagon boxes, or 4-inch square electrical boxes.

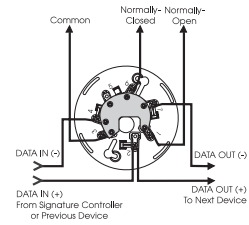|			
☐GSA-IB	☐GSA-IB4 (4" with trim skirt)	Isolator Detector Base	Data Sheet K85001-0619

Relay Detector Base

This base includes a relay. Normally-open or closed operation is selected during installation. The dry contact is rated for 1 amp (pilot duty) @ 30 Vdc. The relay's position is supervised to avoid accidentally jarring it out of position. The relay base does not support the SIGA-LED remote LED. It mounts to North American one-gang boxes, 3½ or 4-inch octagon boxes, or 4-inch square electrical boxes. Bases for 4-inch square boxes include a trim skirt.
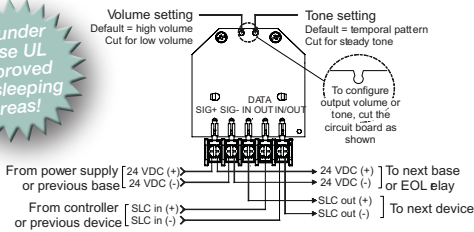
| ☐ GSA-RB | ☐ GSA-RB4 (with trim skirt) | Relay Detector Base | Data Sheet K85001-0619 | ☐ |

Sounder Base UL approved for sleeping areas!

Audible (Sounder) Bases for CO and Fire Detectors

Sounder Bases for CO and fire detectors add audible output functions to V-PCOS and Signature (GSA) Series intelligent detectors. Bases can operate as independent local alarms, or as part of a zone or system alarm with synchronized audible output. SIGA-AB4G-LF is UL listed for sleeping areas and other applications requiring 520 Hz low frequency audible tones. GSA-SBT and SIGA-AB4G-LF audible bases may be used with combination smoke/CO detectors when a GSA-T3T4 module is installed on the same data loop.

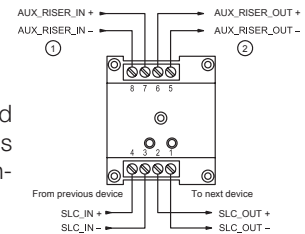| SIGA-AB4G-LF | Low Frequency Sounder Base, V-PCOS and GSA Series compatible | Data Sheet K85001-0640 | ☐ |
| GSA-SBT | Sounder Base, V-PCOS compatible | Data Sheet K85001-0640 | ☐ |
| GSA-AB4G | Sounder Base, GSA Series compatible | Data Sheet K85001-0640 | ☐ |

GSA-T3T4 Temporal Pattern Generator

The GSA-T3T4 Temporal Pattern Generator is an addressable device that generates sound patterns for carbon monoxide (CO) and fire signals for the GSA-SBT sounder base. The control panel sends synchronization and channel commands to the GSA-T3T4; the channel selection determines the pattern.

| GSA-T3T4 | Temporal Pattern Generator for GSA-SBT Sounder Base | Data Sheet K85001-0623 | ☐ |

CO/Fire Detection Accessories

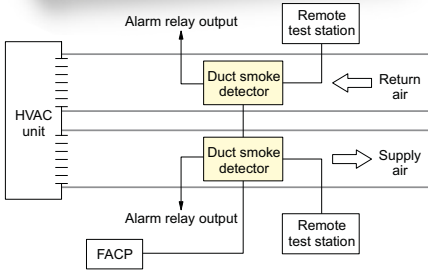| GSA-LED | Remote Alarm LED (not for EN54 applications) | Data Sheet K85001-0623 | ☐ |
SIGA-TS4	Trim Skirt (supplied with 4-inch bases)	Data Sheet K85001-0623	☐
2-SPRC2	Replacement Smoke Chamber for V-PCOS detectors	Data Sheet K85001-0623	☐
2-CORPL	Replacement CO Sensor for V-PCOS detectors	Data Sheet K85001-0623	☐

SuperDuct Duct Detectors

Less than two inches deep, SuperDuct analog addressable smoke detectors are ideal for installation in ductwork, where space is always at a premium. Offering the most advanced and most reliable performance in its class, SuperDuct represents the perfect balance of practical design and advanced technology.

SuperDuct detectors feature a unique design that speeds installation and simplifies maintenance. Removable dust filters, conformally coated circuit boards, and optional water-resistant gaskets keep contaminants away from components, ensuring years of trouble-free service. When cleaning is required, the assemblies come apart easily and snap back together in seconds.

GSA-SD	Analog Addressable SuperDuct Detector		Data Sheet K85001-0584
Sampling Tubes	☐SD-T8 (8") ☐SD-T42 (42")	☐SD-T18 (18") ☐SD-T60 (60")	☐SD-T24 (24") ☐SD-T78 (78")	☐SD-T36 (36") ☐SD-T120 (120")
Remote Test Stations	☐SD-TRM (magnetic)	☐SD-TRK (keyed)	☐GSA-LED (Remote alarm LED)	
Accessories	☐SD-GSK (cover gasket kit) ☐SD-MAG (Test magnet kit) ☐SD-VTK (Air velocity test kit, stoppers only)			

Addressable initiating

Input/Output Modules

GSA series input/output modules are extremely flexible and powerful devices that gather analog information from the slave devices connected to them and convert this data into digital signals. They are available in models that mount in standard one- or two-gang electrical boxes, as well as versions that plug into UIO motherboards.

Plug-in UIOs with motherboard
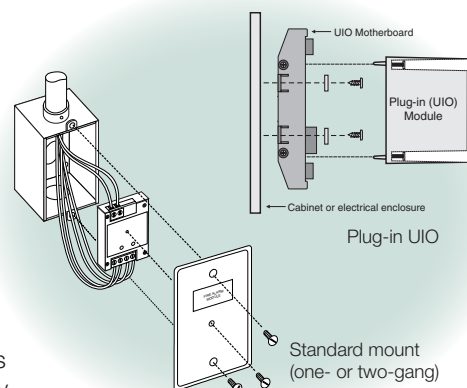
Standard two-gang mount

The actual function of each module is determined by its installer-selected personality code. This is downloaded to the module from the device controller during system configuration. Because they are intelligent devices, all decisions are made at the module. This allows lower communication speed but very fast control panel response time and less sensitivity to line noise and loop wiring properties. As a result, twisted or shielded wire is not required.

Module mounting and installation options

GSA series input/output modules are available in models that feature two mounting options: standard mount and plug-in.

Standard mount models are installed to North American two-gang or one-gang electrical boxes, making them ideal for locations where only one module is required. Separate I/O and data loop connections are made to each module.

Plug-in UIO modules mount to UIO motherboards. Two- and six-module UIO motherboards are available, making them ideal for installations where more than one module is required. Motherboards can accommodate individual risers for each on-board module, or shared risers in any combination with their UIO modules. All wiring connections are made to terminal blocks on the motherboard. UIO assemblies may be mounted in either cabinets, or standard electrical enclosures.

UIO Motherboard

Plug-in (UIO) Module

Cabinet or electrical enclosure

Plug-in UIO

Standard mount (one- or two-gang)

Universal Class A/B Module

The Universal Class A/B Module is used to connect initiating, appliance, or two-wire smoke circuits in either Class A or Class B configurations. The plug-in version can also be used as a Class A dry contact initiating device circuit. The actual function of this module is determined by the "personality code" selected by the installer. Up to fifteen personalities are available.

GSA-UM

GSA-MAB

GSA-UM	Universal Class A/B Module (Two-gang standard mount)	Data Sheet K85001-0275
GSA-MAB	Universal Class A/B UIO (Plug-in) Module	Data Sheet K85001-0275

Class B Input Module

The Class B Input Module is used to connect Class B normally-open Alarm, Supervisory, or Monitor type dry contact initiating device circuits. The standard-mount version is available with either one or two input connections. The plug-in version accepts two input connections. The actual function of this module is determined by the "personality code" selected by the installer. A total of four personalities are available.

GSA-CT1/CT2

GSA-MCT2

GSA-CT1	Single Input Module (One-gang standard mount)	Data Sheet K85001-0241
GSA-CT2	Dual Input Module (One-gang standard mount)	Data Sheet K85001-0241
GSA-MCT2	Dual Input UIO (Plug-in) Module	Data Sheet K85001-0241

Waterflow/Tamper Module

The GSA-WTM Waterflow/Tamper Module is a two circuit intelligent module. Circuit 1 is for Class B normally-open waterflow alarm switches. When the input contact is closed for approximately 16 seconds, an "alarm" signal is sent to the loop controller. Circuit 2 is for Class B normally open dry contact supervisory and tamper switches. When the input contact is closed, an "active" signal is sent to the loop controller. Conditions on both circuits are latched at the module.

GSA-WTM

GSA-WTM	Waterflow/Tamper Module (One-gang standard mount)	Data Sheet K85001-0297

Isolator Module

The GSA-IM Isolator Module is an intelligent device that allows part of the data loop to continue operating in the event of a short circuit. The module can be wired into a Class A data loop at any point. A maximum of 96 isolator modules can be installed on one circuit. If a fault occurs, the isolator cuts power to all devices beyond the isolator on the loop. Once activated, the line fault isolator continuously checks the faulted side of the loop to determine if the short still exists. When the fault is cleared, the module automatically restores the entire data loop to its normal condition.

GSA-IM

GSA-IM	Fault Isolator Module (Two-gang standard mount)	Data Sheet K85001-0271

Monitor Module

The GSA-MM1 is a single-circuit intelligent module that includes a Class B normally-open dry contact. This is used for monitoring input from devices such as fans, dampers, and doors. When the input contact is closed, an "active" signal is sent to the loop controller. The active condition is not latched at the module.

GSA-MM1

GSA-MM1	Monitor Module (One-gang standard mount)	Data Sheet K85001-0297

Signal Module

The Signal Module is used to connect, upon command from the loop controller, supervised Class B signal or telephone circuits to their respective power inputs. Models are available with one or two power inputs. These may be either polarized 24 Vdc to operate audible and visual signal appliances, or 25 and 70VRMS to operate audio evacuation speakers and firefighter's telephones. The actual function of this module is determined by the "personality code" selected by the installer. A total of three personalities are available.

GSA-CC1/CC2

GSA-MCC1/MCC2

GSA-CC1	Single Input Signal Module (Two-gang standard mount)	Data Sheet K85001-0237
GSA-MCC1	Single Input Signal UIO (Plug-in) Module	Data Sheet K85001-0237
GSA-CC2	Dual Input Signal Module (Two-gang standard mount)	Data Sheet K85001-0237
GSA-MCC2	Dual Input Signal UIO (Plug-in) Module	Data Sheet K85001-0237
SIGA-CC2A	Dual Input Signal Module with Class A Operation (2-gang mount)	Data Sheet K85001-0609
SIGA-MCC2A	Dual Input Signal UIO with Class A Operation (Plug-in)	Data Sheet K85001-0609

Control Relay Module

The Control Relay Module provides a Form C dry relay contact to control external appliances such as door closers, fans, dampers etc. This device does not provide supervision of the state of the relay contact. Instead, the on-board microprocessor ensures that the relay is in the proper ON/OFF state. Upon command from the loop controller, the relay activates the normally open or normally-closed contact. This module supports only one personality: no user configuration is required.

GSA-CR

GSA-MCR

GSA-CR	Control Relay Module (One-gang standard mount)	Data Sheet K85001-0239
GSA-MCR	Control Relay UIO (Plug-in) Module	Data Sheet K85001-0239

Polarity Reversal Relay Module

The Polarity Reversal Relay Module provides a Form C dry relay contact to power and activate a series of GSA-AB4 Audible Sounder Bases. Upon command from the loop controller, the GSA-CRR reverses the polarity of its 24 Vdc output, thus activating all Sounder Bases on the data loop. This module supports only one personality: no user configuration is required.

GSA-CRR

GSA-MCRR

GSA-CRR	Polarity Reversal Relay Module (One-gang standard mount)	Data Sheet K85001-0239
GSA-MCRR	Polarity Reversal Relay UIO (Plug-in) Module	Data Sheet K85001-0239

Synchronization Output Module

The Synchronization Output Module is an analog addressable device that connects a supervised output circuit to a 24 Vdc riser. The output wiring is monitored for open circuits and short circuits. A short circuit will cause the fire alarm control panel to inhibit the activation of the audible/visual signal circuit so the riser is not connected to the wiring fault. Upon command from the loop controller, the Auto-Sync Output Module connects the output circuit to the riser input.

GSA-CC1S

GSA-MCC1S

GSA-CC1S	Synchronization Output Module (One-gang standard mount)	Data Sheet K85001-0543
GSA-MCC1S	Synchronization Output UIO (Plug-in) Module	Data Sheet K85001-0543

Input/Output Module

The Input/Output Module is an intelligent device that provides
- Output with monitor input
- Input/programmable output
- Input/direct output

GSA-IO

GSA-MMIO

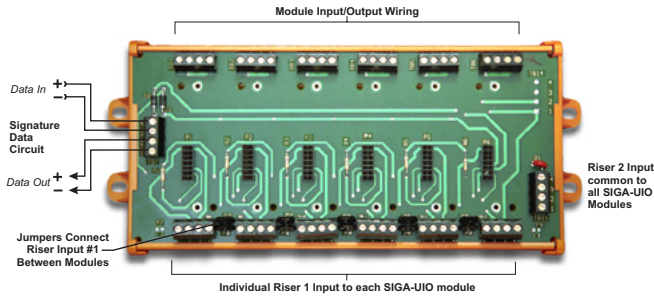|		
GSA-IO	Input/Output Module (One-gang standard mount)	Data Sheet K85001-0533
GSA-MIO	Input/Output UIO (Plug-in) Module	Data Sheet K85001-0533

Releasing Module

The GSA-REL Releasing Module is an analog addressable module that works with fire suppression systems designed to release extinguishing gas such as Halon. Its primary function is the control of sprinkler pre-action routines and the initiation of suppression system deluge functions. The module is easily configured in the field and offers a wide range of options that prevent the unnecessary release of extinguishing agent. Available releasing module accessories include dedicated pull stations, abort switches and service switches. Together with the GSA-REL, they comprise a complete fire suppression package.

GSA-REL	Analog addressable releasing module	Data Sheet K85001-0531	☐
RELA-ABT	Abort station	Data Sheet K85001-0531	☐
RELA-SRV	Service disconnect station	Data Sheet K85001-0531	☐
276A-REL	Manual releasing station (single-action)	Data Sheet K85001-0531	☐
278A-REL	Manual releasing station (double-action)	Data Sheet K85001-0531	☐
RELA-EOL	Polarized end-of-line relay	Data Sheet K85001-0531	☐

Universal Input/Output (UIO) Motherboards

Module Input/Output Wiring

Data In

Signature Data Circuit

Data Out

Riser 2 Input common to all SIGA-UIO Modules

Jumpers Connect Riser Input #1 Between Modules

Individual Riser 1 Input to each SIGA-UIO module

Universal Input/Output Module Motherboards provide mounting and wiring terminations for up to six plug-in UIO (GSA-"M" series) modules. UIO motherboards snap into a rigid extruded track (included) with mounting pads for convenient mounting into a variety of equipment enclosures. UIO modules plug into the board and are held securely in place with captive machine screws. All field wiring connects to terminal blocks on the motherboard, which permits rapid removal and replacement of modules for troubleshooting.

The GSA-UIO2R provides mounting and wiring terminations for up to two UIO modules, and the GSA-UIO6R provides mounting and wiring terminations for up to six UIO modules. Both motherboards feature a riser #1 input and a riser #2 input bus. Jumpers on riser #1 input (between modules), facilitate sharing a single riser among more than one module. This significantly reduces wiring requirements. Removing the jumpers provides separate riser inputs to each adjacent module. Riser #2 input is fixed to each module position and cannot be split. UIO motherboards mount inside the MFC-A cabinet or other suitable UL-listed electrical enclosure. Each MFC-A will hold one UIO2R motherboard or one UIO6 or UIO6R motherboard complete with their full complement of modules.

GSA-UIO2R	Universal Input/Output Module Board with Riser Inputs — 2 Module Positions	Data Sheet K85001-0365	☐
GSA-UIO6R	Universal Input/Output Module Board with Riser Inputs — 6 Module Positions	Data Sheet K85001-0365	☐
GSA-UIO6	Universal Input/Output Module Board — 6 Module Positions	Data Sheet K85001-0365	☐

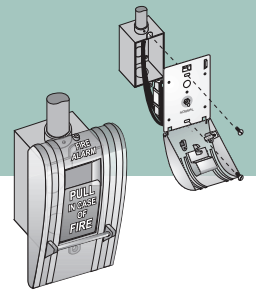## Related Equipment

MFC-A	Multi-function Cabinet (for UIO and Releasing modules)	☐
27193-11	Surface Mount Box - Red, One-gang	☐
27193-16	Surface Mount Box - White, One-gang	☐
27193-21	Surface Mount Box - Red, Two-gang	☐
27193-26	Surface Mount Box - White, Two-gang	☐
235196P	Bi-polar Transient Protector (needed on modules with electromechanical devices)	☐
GSA-MP1	Module Mounting Plate, 1 footprint	☐
GSA-MP2	Module Mounting Plate, 1/2 footprint	☐
GSA-MP2L	Module Mounting Plate, 1/2 extended footprint	☐

SUBMIT
☑

Addressable initiating

Manual Pull Stations

REAR VIEW

TB2

Red LED
(Alarm/Active)

Green LED
(Normal)

TB1

DATA IN (+) → DATA OUT (+)
DATA IN (-) → DATA OUT (-)

From Signature Controller
or Previous Device

To Next Device

Single Action Pull Stations

GSA-M270 series manual pull stations are made from die-cast zinc and finished with red epoxy powder-coat paint. With positive pull-lever operation, one pull on the station handle breaks the rod and turns in a positive alarm. Where two-stage operation is required, GSA-M270P pre-signal models are equipped with a general alarm (GA) keyswitch.

GSA-M270	One Stage Fire Alarm Station, English Markings	Data Sheet K85001-0279
GSA-M270P	Two Stage (Pre-signal) Fire Alarm Station, English Markings	Data Sheet K85001-0279
276-K2	GA Key — for pre-signal station	Data Sheet K85001-0279
270-GLR	20 Break-rods — for GSA-M270 series	Data Sheet K85001-0279
276B-RSB	Surface Mount Box, Red — for GSA-M270 series	Data Sheet K85001-0279

REAR VIEW

TB2

Red LED
(Alarm/Active)

Green LED
(Normal)

TB1

DATA IN (+) → DATA OUT (+)
DATA IN (-) → DATA OUT (-)

From Signature Controller
or Previous Device

To Next Device

Double Action Pull Stations

The double action, single stage GSA-M278 station is a contemporary style manual station made from durable red LEXAN. To initiate an alarm, first lift the upper door, then pull the alarm handle.

GSA-M278	Double Action (One Stage) Fire Alarm Station, English Markings	Data Sheet K85001-0279
276B-RSB	Surface Mount Box, Red — for GSA-M278 series	Data Sheet K85001-0279
276-GLR	20 Break-rods — for GSA-M278 series	Data Sheet K85001-0279

Manual Station Relocator

The Manual Station Relocator is designed to lower the height of a fire alarm pull station to meet ADA requirements. Most existing pull stations are mounted 60 inches (1524mm) or higher above the floor. The Relocator lowers the height to 48 inches (1220mm) without the need for pulling new wires or moving the existing electrical box.

RR-32RL	Pull Station Relocator	Data Sheet K85001-0351

Stopper II

This unique device helps prevent false alarms without restricting legitimate ones. It consists of a tamper-proof clear LEXAN polycarbonate shield and frame that fits easily over manual pull stations. When lifted, it sounds a piercing warning horn.
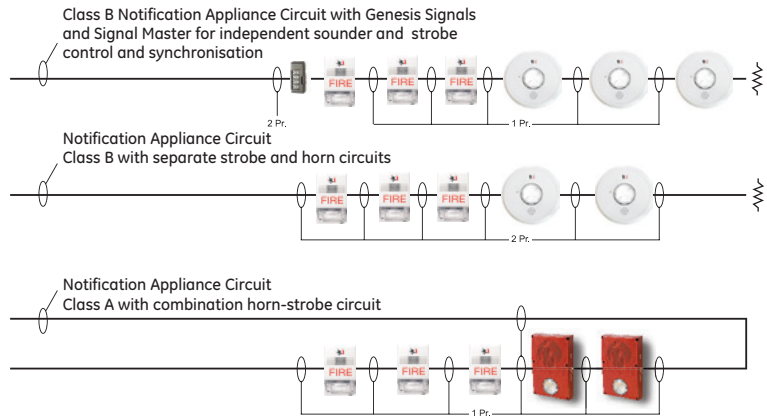
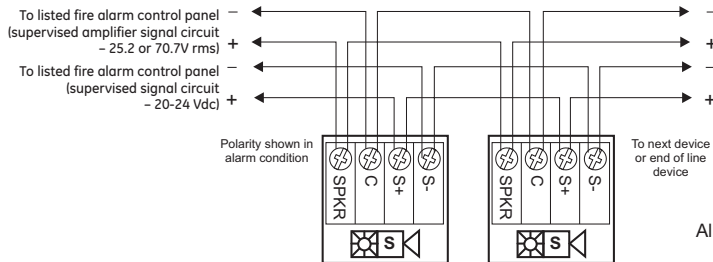|			
☐ STI-1100 (Flush)	☐ STI-1130 (Surface)	Stopper II with Horn	Data Sheet K85001-0491
☐ STI-1200 (Flush)	☐ STI-1230 (Surface)	Stopper II without Horn	Data Sheet K85001-0491
☐ STI-3100 (2" Spacer)	☐ STI-3004 (Conduit Insert)	Spacers	Data Sheet K85001-0491
☐ STI-3002 (Gasket)	☐ STI-3003 (Conduit Gasket)	Weatherproofing	Data Sheet K85001-0491

Notification Appliances

Kidde notification appliances are high-performance devices finely tuned to deliver maximum output in exchange for the lowest possible current draw. Covering the entire spectrum of life safety applications, these devices are durable, dependable, and virtually maintenance-free. And they support a wide range of mounting options that make them ideal for new construction and retrofit applications alike.
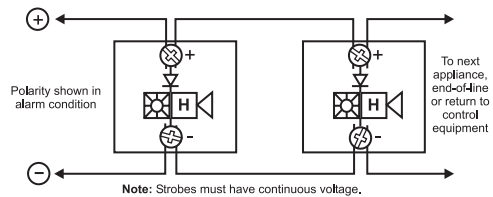
Field Wiring

Notification appliances may be configured for Class A or Class B wiring. Genesis combination horn-strobes, when used with the innovative Signal Master Module, support independent horn control over a single pair of wires and precision synchronization that exceeds UL requirements. This reduces wiring time while meeting the requirements of even the most demanding application.

Class B Notification Appliance Circuit with Genesis Signals and Signal Master for independent sounder and strobe control and synchronisation

2 Pr.

1 Pr.

Notification Appliance Circuit
Class B with separate strobe and horn circuits

2 Pr.

Notification Appliance Circuit
Class A with combination horn-strobe circuit

1 Pr.

Device Wiring, Speaker-strobes

To listed fire alarm control panel (supervised amplifier signal circuit – 25.2 or 70.7V rms)

To listed fire alarm control panel (supervised signal circuit – 20-24 Vdc)

Polarity shown in alarm condition

SPKR C S+ S-

SPKR C S+ S-

To next device or end of line device

Device Wiring, Horn-strobes

Polarity shown in alarm condition

To next appliance, end-of-line or return to control equipment

Note: Strobes must have continuous voltage.

All appliances feature #18 - #12 AWG terminals – ideal for long runs, existing wiring

Strobe Syncrhonization

On a common circuit, strobes flash once per second (1 fps) within 10 milliseconds over a two-hour time period. A synchronization source is required to comply with UL 1971 synchronization standards. Temporal setting (private mode only): synchronized to temporal output on the same circuit.

Syncrhonization Sources

The following control panels, power supplies, and modules provide synchronization sources that enable Genesis strobe devices to comply with UL 1971 synchronization standards: GSA-CC1S, GSA-MCC1S, SIGA-CC2A, GSA-MCC2A, MG1M-RM, MIRMIRBPS6A, MIRMIRBPS10A, APS6A, APS10A, VM Series, VS1, VS2, VS1, VS2, VM, E-FSA64, E-FSA250, Fireshield Plus.

Notification Appliances

Hazardous Location Devices

Door Holders & Relays

Genesis Visual & Audible Signals

A complete line engineered to deliver innovative features and superb output.

Wall Strobes, Horns, Chimes, p. 25

Low Frequency Horns and Horn-Strobes, p. 26

Ceiling Horns, Horn-Strobes, p. 26

Outdoor Horns, Horn-Strobes, p. 27

LED Strobes and Horn-Strobes, p. 27

Wall Speakers and Speaker-strobes, p. 28

Ceiling Speakers, Speaker-strobes, p. 29

Outdoor Speakers, Speaker-Strobes, p. 30

The award-winning Genesis line of products represents excellence in fire alarm notification with looks, features, and performance benefits designed with your project in mind. Wall strobes, horns, and chimes about the size of a deck of playing cards offer a discreet alternative to bulky devices, while speakers and ceiling models with clean modern lines blend inconspicuously with their surroundings.

Signaling on-demand

Though designed for discretion, Genesis signals are also engineered to command attention. Wall-penetrating high dB output and patented FullLight strobe technology immerse the protected area with levels of light and sound that simply can't be ignored – all in exchange for the lowest current demands of any device in their class.

Genesis brings on-demand signaling to every application with an unparalleled range of field-configurable options: horns and chimes with high/low dB output settings; speakers with multiple wattage tap selections; and strobes with selectable candela output and flash rate – options that put you in the driver's seat when time is short, budgets slim, and manpower at a premium. It also means fewer parts to stock, less inventory to worry about, and the flexibility to meet changing demands – on the fly – without having to reinstall equipment or order more parts!

Application flexibility

Whether you're designing for a new landmark structure, or simply retrofitting a local strip mall, competitively-priced Genesis signals bring value, good looks, and installation flexibility to every application. Contact Kidde today to learn how your signal solutions can be the model of discretion.

Genesis G1 Series

Wall Strobes, Horns & Chimes

Genesis signals feature textured housings in architecturally neutral white or traditional fire red. An ingenious iconographic symbol indicates the purpose of the device. This universal symbol is code-compliant and is easily recognized by all building occupants regardless of what language they speak. models with "FIRE" and "ALERT" markings are also available.

Genesis strobes offer 15 to 110 candela output, which is selectable with a conveniently-located switch on the side of the device. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering. *(Data Sheet K85001-0573)*

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ no marking	Red housing ↓ with "FIRE"	Fire Alarm Appliances (with "Running Man" icon)
☐ G1-VM	☐ G1F-VM	☐ G1R-VM	☐ G1RF-VM	Strobe only (15/30/75/110 cd)
	☐ G1F-V1575		☐ G1RF-V1575	Strobe only (15/75 cd[1]), 24 V

Genesis Horns and Horn-strobes reach output levels as high as 99 dB and features a unique multiple frequency tone that results in excellent wall penetration and an unmistakable warning of danger. Horns may be configured for either coded or non-coded signal circuits. They can also be set for low dB output with a jumper cut that reduces horn output by about 5 dB. *(Data Sheet K85001-0573)*

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ no marking	Red housing ↓ with "FIRE"	Fire Alarm Appliances (with "Running Man" icon)
☐ G1-HD	☐ G1F-HD	☐ G1R-HD	☐ G1RF-HD	Horn only (high/low dB)
☐ G1-HDVM	☐ G1F-HDVM	☐ G1R-HDVM	☐ G1RF-HDVM	Horn-strobe (15/30/75/110, high/low dB)
	☐ G1F-HDV1575		☐ G1RF-HDV1575	Horn-strobe (15/75 cd[1], high/low dB), 24 V
☐ G1-P	☐ G1F-P	☐ G1R-P	☐ G1RF-P	Steady horn (not compatible with Signal Master)

Genesis mass notification appliances bring the same high-performance fire alarm features and unobtrusive design to mass notification applications. Available with amber lenses and optional "ALERT" housing labels, they are ideal for applications that require differentiation between fire alarm and mass notification alerts. *(Data Sheet K85001-0573)*

White housing ↓ no marking	White housing ↓ with "ALERT"	Mass Notification Appliances (with <u>no</u> "Running Man" icon)
☐ G1WN-VMA	☐ G1WA-VMA	Strobe only, amber lens (A/B/C/D cd settings)
☐ G1WN-VMC	☐ G1WA-VMC	Strobe only, clear lens (15/30/75/110 cd)

Genesis chimes and chime-strobes produce a pleasing mellow tone. When steady (non-stroked) voltage is applied, the chime automatically pulses at 60 strokes per minute, or may be field-configured for temporal output. When installed with a GIM Signal Master Module, the chime may also be field-configured for coded operation, which enables the chime output to match the rate that voltage is applied to the circuit. Chimes may be set for low dB output with a jumper cut that reduces sound output by about 5 dB. *(Data Sheet K85001-0574)*

↓ White housing	↓ Red housing	Chimes and Chime-strobes
☐ G1-CVM	☐ G1R-CVM	Chime-strobe (15/30/75/110, high/low dB)
☐ G1-C	☐ G1R-C	Chime only (high/low dB)

Trim plates for wall horns, chimes, and strobes are ideal for covering openings left behind during retrofits.

White plate ↓ no marking	White plate ↓ with "FIRE"	Red plate ↓ no "FIRE"	Red plate ↓ with "FIRE"	White plateFire ↓ with "ALERT"	Trim Plates
☐ G1T	☐ G1T-FIRE	☐ G1RT	☐ G1RT-FIRE	☐ G1WT-ALERT	Trim plate for 2-gang or 4" boxes

[1] 15/75 cd models provide fixed output. The 15 cd output component complies with UL1971. The 75 cd output component complies with UL 1638.

Genesis G4LF Series Wall Models

UL compliant signals for sleeping areas!

Low Frequency (520 Hz) Horns and Horn-Strobes

G4LF Series notification appliances provide the benefits of Genesis life safety signals with output suitable for sleeping areas and other applications requiring low frequency audible tones. These high-performance appliances generate a crisp 520 Hz tone in the standard 3-3 temporal pattern. An optional setting configures the appliance for continuous audible output — a critical feature for notification appliance circuits that are coded with a CDR-3 coder module. All G4LF appliances feature field-configurable high and low dB output settings. Horn-Strobe models feature field-selectable 15, 30, or 75 cd output settings.

G4LFWN-HVM	Horn-Strobe, 520 Hz, White Housing, No Marking, 15/30/75 cd	Data Sheet K85001-0639
G4LFWF-HVM	Horn-Strobe, 520 Hz, White Housing, FIRE Marking, 15/30/75 cd	Data Sheet K85001-0639
G4LFRN-HVM	Horn-Strobe, 520 Hz, Red Housing, No Marking, 15/30/75 cd	Data Sheet K85001-0639
G4LFRF-HVM	Horn-Strobe, 520 Hz, Red Housing, FIRE Marking, 15/30/75 cd	Data Sheet K85001-0639
G4LFWN-H	Horn, 520 Hz, White Housing, No Marking	Data Sheet K85001-0639
G4LFWF-H	Horn, 520 Hz, White Housing, FIRE Marking	Data Sheet K85001-0639
G4LFRN-H	Horn, 520 Hz, Red Housing, No Marking	Data Sheet K85001-0639
G4LFRF-H	Horn, 520 Hz, Red Housing, FIRE Marking	Data Sheet K85001-0639

Genesis GC Series Ceiling Models

Strobes and Horn-Strobes

Genesis ceiling strobes are available in low- or high-candela output models featuring 15 to 95, or 95 to 177 cd output. The setting is selectable with a conveniently-located switch that remains clearly visible even after final installation, yet it is locked in place to prevent unauthorized movement after installation.

Genesis horn output reaches as high as 99 dB (peak) and features a unique multiple frequency tone that results in excellent wall penetration. Horns may be set for low dB output with a jumper cut that reduces horn output by about 5 dB.

All models are rated for both wall and ceiling installation.

Ceiling Strobes
Data Sheet K85001-0557

Ceiling Horn-strobes
Data Sheet K85001-0559

Fire Alarm Appliances

All fire alarm appliances come with the "Running Man" Icon	White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ with "FIRE"
Strobe, 15/30/75/110 (standard output) cd, selectable	☐ GC-VM	☐ GCF-VM	☐ GCFR-VM
Strobe, 95/115/150/177 (high output) cd, selectable	☐ GC-VMH	☐ GCF-VMH	
Horn-strobe, 15/30/75/110 (standard output) cd, selectable	☐ GC-HDVM	☐ GCF-HDVM	☐ GCFR-HDVM
Horn-strobe, 95/115/150/177 (high output) cd, selectable	☐ GC-HDVMH	☐ GCF-HDVMH	

Mass Notification Appliances

White housings No "Running Man" Icon	Clear lens ↓ no marking	Clear lens ↓ with "ALERT"	Amber lens ↓ no marking	Amber lens ↓ with "ALERT"
Strobe, four standard cd settings	☐ GCWN-VMC	☐ GCWA-VMC	☐ GCWN-VMA	☐ GCWA-VMA
Strobe, four high output cd settings	☐ GCWN-VMHC	☐ GCWA-VMHC	☐ GCWN-VMHA	☐ GCWA-VMHA

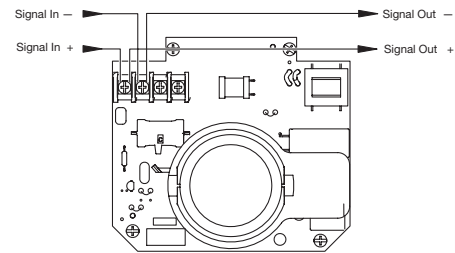## Genesis WG4 Series Wall Models

Weatherproof Horns and Horn-Strobes

Genesis WG4 Series horns and horn-strobes are among the most versatile emergency signals of their kind. NEMA 4X rated for indoor or outdoor use, they are suitable for a wide range of wet and harsh environments with a listed operating temperature range of as low as -31°F to as high as 151°F (-35°C to 66°C).

Refer to Data Sheet FX85001-0628 -- Genesis Outdoor Horns and Strobes for details.

Field Configuration

Genesis WG4 strobes feature four selectable light output settings. Cd selections are changed by removing the cover and simply sliding the switches to the desired setting, which remains visible through a small window on the front of the device after the cover is replaced. Genesis Horn-strobes may also be configured for high or low dB output and temporal flash. This battery-saving feature is intended for private mode signaling only.

Signal In —   Signal Out —
Signal In +   Signal Out +

—/+ designations indicate the signal polarity required to activate the device.

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ no marking	Red housing ↓ with "FIRE"	Outdoor Fire Alarm Appliances
☐ WG4WN-H	☐ WG4WF-H	☐ WG4RN-H	☐ WG4RF-H	Horn Only
☐ WG4WN-HVMC	☐ WG4WF-HVMC	☐ WG4RN-HVMC	☐ WG4RF-HVMC	Horn-Strobe, standard cd output
☐ WG4WN-HVMHC	☐ WG4WF-HVMHC	☐ WG4RN-HVMHC	☐ WG4RF-HVMHC	Horn Only, high cd output

WG4 Mounting Accessories

☐ WG4WTS (white)	☐ WG4RTS (red)	Surface Skirt for Genesis WG4 Appliances
☐ 74347U (white)	☐ 449 (red)	Surface mount box, outdoor rated
WG4GSKT		Genesis WG4 Full Body Mounting Gasket for Smooth Surfaces

Genesis GL Series Wall Models

LED Strobes

Genesis GL Series horns and LED strobes break the current draw barrier with innovative technology that not only makes them inexpensive to install and operate, but also allows them to maintain the sleek low-profile design that has made Genesis appliances a favorite among facility owners, architects, and designers. Horn-Strobe models feature field-selectable 15, 30, 75, or 110 cd output settings. Horn-strobe and horn-only appliances feature field-configurable high/low dB and temporal/steady audible output.

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ no marking	Red housing ↓ with "FIRE"	All fire alarm appliances come with the "Running Man" Icon
☐ GL1WN-HDVMC	☐ GL1WF-HDVMC	☐ GL1RN-HDVMC	☐ GL1RF-HDVMC	Horn-Strobe
☐ GL1WN-HD	☐ GL1WF-HD	☐ GL1RN-HD	☐ GL1RF-HD	Horn-only
☐ GL1WN-VMC	☐ GL1WF-VMC	☐ GL1RN-VMC	☐ GL1RF-VMC	Strobe-only
☐ GL1WN-TP (white)		☐ GL1RN-TP (red)		Trim Plate for four-inch square boxes
☐ GL1WN-BB1G (white)		☐ GL1RN-BB1G (red)		One-gang surface box

SUBMIT

Notification Appliances

Hazardous Location Devices

Door Holders & Relays

27
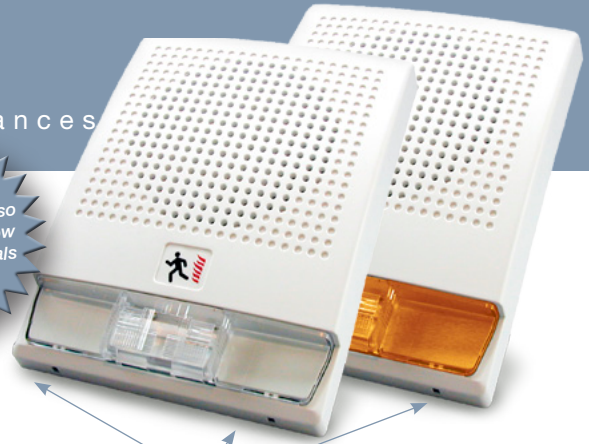
VM Series
Head End

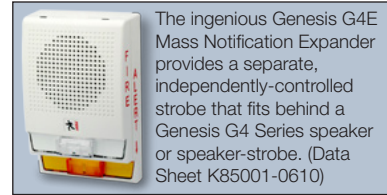Initiating
Devices

Notification
Appliances

Genesis G4 Series Wall Models

Speakers and Speaker-strobes

Genesis high fidelity Speakers are also UL compliant low frequency signals for sleeping areas!

Genesis speakers combine high performance output with a low profile design to deliver a life safety audio solution that's as versatile as it is effective. Protruding no more than one inch from the wall, these appliances blend inconspicuously with any decor. All speakers feature selectable ¼, ½, 1, or 2 watt operation.

Speaker-strobes feature field-configurable candela output, selectable with a conveniently-located switch on the bottom of the device.

Genesis high fidelity Speakers are can generate UL compliant low frequency signals now required for sleeping areas!

Candela and wattage settings remain clearly visible even after final installation.

The ingenious Genesis G4E Mass Notification Expander provides a separate, independently-controlled strobe that fits behind a Genesis G4 Series speaker or speaker-strobe. (Data Sheet K85001-0610)

Speakers and speaker-strobes *(Data Sheet K85001-0642)*

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ no marking	Red housing ↓ with "FIRE"	Fire Alarm Speakers (with "Running Man" icon)
☐ G4-S2	☐ G4F-S2	☐ G4R-S2	☐ G4RF-S2	25 V Speaker
☐ G4-S7	☐ G4F-S7	☐ G4R-S7	☐ G4RF-S7	70 V Speaker
☐ G4-S2VM	☐ G4F-S2VM	☐ G4R-S2VM	☐ G4RF-S2VM	25 V Speaker-strobe (15/30/75/110 cd settings)
☐ G4-S7VM	☐ G4F-S7VM	☐ G4R-S7VM		70 V Speaker-strobe (15/30/75/110 cd settings)
	☐ G4F-S7V1575		☐ G4RF-S7V1575	70 V Speaker (15/75 cd)

High fidelity speakers and speaker-strobes meet new standards for audible tones in sleeping areas and produce crisp, clear voice audio output that is highly intelligible over large areas. *(Data Sheet K85001-0642)*

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ no marking	Red housing ↓ with "FIRE"	Fire Alarm Speakers (no "Running Man" icon)
☐ G4HFN-S2	☐ G4HFWF-S2	☐ G4HFRN-S2	☐ G4HFRF-S2	25 V Speaker
☐ G4HFN-S7	☐ G4HFWF-S7	☐ G4HFRN-S7	☐ G4HFRF-S7	70 V Speaker
☐ G4HFN-S2VM	☐ G4HFWF-S2VM	☐ G4HFRN-S2VM	☐ G4HFRF-S2VM	25 V Speaker-strobe (15/30/75/110 cd settings)
☐ G4HFN-S7VM	☐ G4HFWF-S7VM	☐ G4HFRN-S7VM	☐ G4HFRF-S7VM	70 V Speaker-strobe (15/30/75/110 cd settings)

High fidelity mass notification speakers and speaker-strobes feature optional amber lenses and "ALERT" lettering on white housings, and meet new standards for audible tones in sleeping areas. *(Data Sheet K85001-0642)*

Clear lens ↓ "ALERT"	Amber lens ↓ no marking	Amber lens ↓ "ALERT"	High Fidelity Mass Notification Speakers — white housing, no "Running Man icon"
☐ G4HFWA-S2VMC	☐ G4HFWN-S2VMA	☐ G4HFWA-S2VMA	25 V Speaker-strobe (A/B/C/D cd settings)
☐ G4HFWA-S7VMC	☐ G4HFWN-S7VMA	☐ G4HFWA-S7VMA	70 V Speaker-strobe (A/B/C/D cd settings)
Speaker only models:	☐ G4HFWA-S2 (25 V, "ALERT" marking)	☐ G4HFWA-S7 (70 V, "ALERT" marking)	

Mass notification speakers and speaker-strobes feature amber lenses and optional "ALERT" lettering. They are ideal for applications that require differentiation between fire alarm and mass notification alerts. *(Data Sheet K85001-0642)*

Clear lens ↓ no marking	Clear lens ↓ "ALERT"	Amber lens ↓ no marking	Amber lens ↓ "ALERT"	Mass Notification Speakers — white housing, no "Running Man" icon
☐ G4WN-S2VMC	☐ G4WA-S2VMC	☐ G4WN-S2VMA	☐ G4WA-S2VMA	25 V Speaker-strobe (A/B/C/D cd settings)
☐ G4WN-S7VMC	☐ G4WA-S7VMC	☐ G4WN-S7VMA	☐ G4WA-S7VMA	70 V Speaker-strobe (A/B/C/D cd settings)
☐ G4EWN-C	☐ G4EWF-C	☐ G4EWN-A	☐ G4EWA-A	Mass notification expander, white
		☐ G4ERN-A	☐ G4ERA-A	Mass notification expander, red
Speaker-only models, 25 V:	☐ G4WN-S2 (no marking)		☐ G4WA-S2 ("ALERT" marking)	
Speaker-only models, 70 V:	☐ G4WN-S7 (no marking)		☐ G4WA-S7 ("ALERT" marking)	

Genesis GC Series Ceiling Models

Speakers and Speaker-Strobes

The Genesis line of multi-candela and multi-wattage ceiling signals feature all the hallmarks that have made Genesis products a big hit with designers, engineers, building owners, and installers everywhere. Precision timing electronics, and low current draw bring the benefits of the popular Genesis wall-mount models to ceiling applications. These signals are 30 percent slimmer than comparable signals on the market. They are compatible with standard 4-inch (10 cm) square electrical boxes and don't require extension rings or trim plates.

Genesis high fidelity Speakers are also UL compliant low frequency signals for sleeping areas!

SUBMIT ☑

Select 15/30/75/95 and 95/115/150/177 candela output!

Select ¼, ½, 1, or 2 watt operation!

Data Sheet K85001-0641

Fire Alarm Speakers and Speaker-strobes

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ with "FIRE"	All fire alarm appliances come with the "Running Man" Icon
☐ GC-S2VM	☐ GCF-S2VM		25 V Speaker-strobe (15/30/75/110 cd setting)
☐ GC-S2VMH	☐ GCF-S2VMH		25 V Speaker-strobe (95/115/150/177 cd setting)
	☐ GCF-S7VM		70 V Speaker-strobe (15/30/75/110 cd setting)
☐ GC-S7VMH	☐ GCF-S7VMH		70 V Speaker-strobe (95/115/150/177 cd setting)
☐ GC-S2		☐ GCFR-S2	Speaker-only models, 25 V
☐ GC-S7	☐ GCF-S7	☐ GCFR-S7	Speaker-only models, 70 V

High Fidelity Fire Alarm Speakers and Speaker-Strobes

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ no marking	Red housing ↓ with "FIRE"	All fire alarm appliances come with the "Running Man" Icon
☐ GCHFWN-S2VMC	☐ GCHFWF-S2VMC	☐ GCHFRN-S2VMC	☐ GCHFRF-S2VMC	25 V Spkr + 15/30/75/110 cd strobe
☐ GCHFWN-S2VMCH	☐ GCHFWF-S2VMCH	☐ GCHFRN-S2VMCH	☐ GCHFRF-S2VMCH	25 V Spkr + 95/115/150/177 cd strobe
☐ GCHFWN-S7VMC	☐ GCHFWF-S7VMC	☐ GCHFRN-S7VMC	☐ GCHFRF-S7VMC	70 V Spkr + 15/30/75/110 cd strobe
☐ GCHFWN-S7VMCH	☐ GCHFWF-S7VMCH	☐ GCHFRN-S7VMCH	☐ GCHFRF-S7VMCH	70 V Spkr + 95/115/150/177 cd strobe
☐ GCHFWN-S2	☐ GCHFWF-S2	☐ GCHFRN-S2	☐ GCHFRF-S2	Speaker-only models, 25 V
☐ GCHFWN-S7	☐ GCHFWF-S7	☐ GCHFRN-S7	☐ GCHFRF-S7	Speaker-only models, 70 V

High Fidelity Mass Notification Speakers and Speaker-strobes

Clear lens ↓ with "ALERT"	Amber lens ↓ no marking	Amber lens ↓ with "ALERT"	White housings No "Running Man" Icon
☐ GCHFWA-S2VMC	☐ GCHFWN-S2VMA	☐ GCHFWA-S2VMA	25 V Speaker, four standard cd settings
☐ GCHFWA-S2VMCH	☐ GCHFWN-S2VMAH	☐ GCHFWA-S2VMAH	25 V Speaker, four high cd settings
☐ GCHFWA-S7VMC	☐ GCHFWN-S7VMA	☐ GCHFWA-S7VMA	70 V Speaker, four standard cd settings
☐ GCHFWA-S7VMCH	☐ GCHFWN-S7VMAH	☐ GCHFWA-S7VMAH	70 V Speaker, four high cd settings
☐ GCHFWA-S2 (25 V, "ALERT" marking)		☐ GCHFWA-S7 (70 V, "ALERT" marking) Speaker-only models	

Mass Notification Speakers and Speaker Strobes

Clear lens ↓ no marking	Clear lens ↓ with "ALERT"	Amber lens ↓ no marking	Amber lens ↓ with "ALERT"	White housings No "Running Man" Icon
☐ GCWN-S2VMC	☐ GCWA-S2VMC	☐ GCWN-S2VMA	☐ GCWA-S2VMA	Speaker-strobe, 25 V, four standard cd settings
☐ GCWN-S2VMHC	☐ GCWA-S2VMHC	☐ GCWN-S2VMHA	☐ GCWA-S2VMHA	Speaker-strobe, 25 V, four high output cd settings
☐ GCWN-S7VMC	☐ GCWA-S7VMC	☐ GCWN-S7VMA	☐ GCWA-S7VMA	Speaker-strobe, 70 V, four standard cd settings
☐ GCWN-S7VMHC	☐ GCWA-S7VMHC	☐ GCWN-S7VMHA	☐ GCWA-S7VMHA	Speaker-strobe, 70 V, four high output cd settings
☐ GCWN-S2 (25 V)	☐ GCWA-S2 (25 V, "ALERT")	☐ GCWN-S7 (70 V)	☐ GCWA-S7 (70 V, "ALERT") Speaker-only models	

Notification Appliances

Hazardous Location Devices

Door Holders & Relays

29

VM Series
Head End

Initiating
Devices

Notification
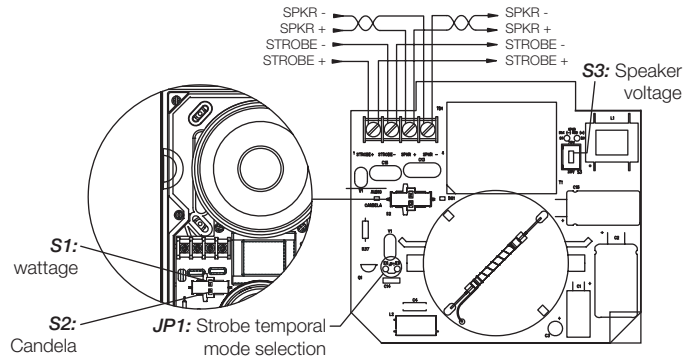Appliances

Genesis WG4 Series Wall Models

Weatherproof Speakers and Speaker-Strobes

Genesis WG4 Series speakers and speaker-strobes are among the most versatile emergency signals of their kind. NEMA 4X rated for indoor or outdoor use, they are suitable for a wide range of wet and harsh environments with a listed operating temperature range of as low as -31°F to as high as 151°F (-35°C to 66°C).

Refer to Data Sheet K85001-0627 -- Genesis Outdoor Speakers and Strobes for details.

Field Configuration

Genesis WG4 speakers may be set 70- or 25-Volt operation, and for ¼, ½, 1, or 2 watt operation. Strobe models feature four selectable light output settings. Wattage and cd selections are changed by removing the cover and simply sliding the switches to the desired settings, which remain visible through a small window on the front of the device after the cover is replaced. Genesis speaker-strobes may also be configured for temporal flash. This battery-saving feature is intended for private mode signaling only. To set the device for temporal flash, snip the jumper at JP1.

SPKR -
SPKR +
STROBE -
STROBE +

SPKR -
SPKR +
STROBE -
STROBE +

S3: Speaker voltage

S1: wattage

S2: Candela

JP1: Strobe temporal mode selection

| WG4RF-S | WG4RF-SVMC | WG4WF-S | WG4WF-SVMC | WG4RN-S | WG4RN-SVMC | WG4WN-S | WG4WN-SVMC | WG4WN-SVMA | WG4WA-SVMA | WG4WA-SVMC |

White housing ↓ no marking	White housing ↓ with "FIRE"	Red housing ↓ no marking	Red housing ↓ with "FIRE"	Fire Alarm Speakers
☐ WG4WN-S	☐ WG4WF-S	☐ WG4RN-S	☐ WG4RF-S	25/70 V Speaker
☐ WG4WN-SVMC	☐ WG4WF-SVMC	☐ WG4RN-SVMC	☐ WG4RF-SVMC	25/70 V Speaker-strobe (15/29/70/87 cd)
	☐ WG4WF-SVMHC	☐ WG4RN-SVMHC	☐ WG4RF-SVMHC	25/70 V Speaker-strobe (102/123/147/161 cd)

Genesis mass notification speakers and speaker-strobes bring the same high-performance fire alarm features and unobtrusive design to mass notification applications. Available with amber lenses and optional "ALERT" lettering, they are ideal for applications that require differentiation between fire alarm and mass notification alerts.

White housing ↓ no marking	White housing ↓ "ALERT"	Mass Notification Speakers — white housing, no "Running Man" icon
☐ WG4WN-SVMA	☐ WG4WA-SVMA	25/70 V Speaker-strobe, amber lens (13/25/5962 cd output)
☐ WG4WN-SVMHA	☐ WG4WA-SVMHA	25/70 V Speaker-strobe, amber lens (84/101/125/130 cd output)
	☐ WG4WA-SVMC	25/70 V Speaker-strobe, clear lens (15/29/70/87 cd output)
☐ WG4WN-SVMHC	☐ WG4WA-SVMHC	25/70 V Speaker-strobe, clear lens (102/123/147/161 cd output)
	☐ WG4WA-S	25/70 V Speaker

Trim skirts

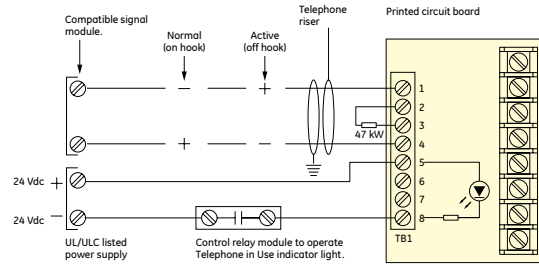| ☐ WG4WTS (white) | ☐ WG4RTS (red) | Surface Skirt for Genesis WG4 appliance family. |

Firefighters' Telephones

Firefighters' telephones are typically installed in corridors, lobbies, mechanical rooms, stairways, or other stategic locations. When lifted from its cradle, or plugged into a suitable wall jack, the handset activates audible and visible signals at the VM control panel.
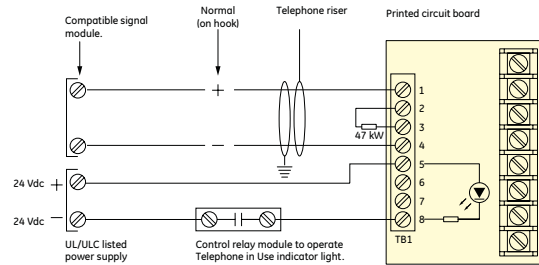
Kidde fire alarm telephones are rugged communications devices for emergency use. Enclosed keylocked telephone stations comprise three separately ordered components: the handset assembly, the frontplate, and the wallbox. Depending on how the phones are wired, they are supervised for three or four state operation. Frontplates are available with either metal or break glass insterts.

MEA approved warden stations feature doors with magnetic latches and one-state handsets with armoured cords. Warden stations mount to 6832-1 wallboxes. Portable handsets plug into one-gang receptacles. Handsets are available in black or red. The TCS-6 cabinet provides storage for up to six handsets.

Four-state operation

Three-state operation

6830-NY-S4

6831-1   **6831-4**   **6832-1**   **6830-4**   **6830-3**   **6833-4**

Firefighters' Telephones

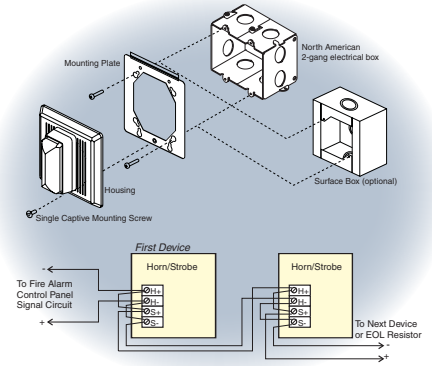|	
6830-NY-F4	Four-state Remote Telephone Warden Station - Flush. Armored armored cord.
6830-NY-S4	Four-state Remote Telephone Warden Station - Surface. Armored armored cord.
6830-5A-4	Four-state Telephone Handset Assembly - Red, 60" (1500mm) Coiled Cord, Push-to-talk button.
6830-6A-4	Four-state Telephone Handset Assembly - Red, 60" (1500mm) Armored Cord, Push-to-talk button.
6830-4	Four-state Telephone Handset Assembly - Red, 60" (1500mm) Coiled Cord.
6830-5A-4	Three-state Telephone Handset Assembly - Red, 60" (1500mm) Coiled Cord, Push-to-talk button.
6830-6A-4	Three-state Telephone Handset Assembly - Red, 60" (1500mm) Armored Cord, Push-to-talk button.
6833-4	Four-state Portable Telephone Handset Receptacle, 1-gang Stainless-steel Faceplate.
6830-3	Portable Telephone Handset - Black c/w 60" (1500mm) Coiled Cord.
6700-0061	Portable Telephone Handset - Red c/w 60" (1500mm) Coiled Cord.
6831-1	Frontplate - Flush Mount, Red Finish, Break Glass Type c/w 2 keys.
6831-2	Frontplate - Flush Mount, Red Finish, Non-Break Glass Type c/w 2 keys.
6831-3	Frontplate - Surface Mount Red Finish, Break Glass Type c/w 2 keys.
6831-4	Frontplate - Surface Mounting Red Finish, Non-Break Glass Type c/w 2 keys.
6832-1	Wallbox - Flush or Surface mount, Red finish. 14" (356mm) H x 8-1/2" (216mm) W x 3½" (89mm) D.
TCS-6	Portable handset storage cabinet. Surface mount c/w keylock. Red finish with white lettering.

SUBMIT ✔

Enhanced Integrity Series

Harsh Environment Signals

All Enhanced Integrity devices are UL 1971 listed for both wall and ceiling orientation. Enhanced Integrity strobes meet the latest UL1971 synchronization requirements when used with Genesis sync sources. Integrity devices are shipped with wall mount style "FIRE" lens markings. Other lens markings are available.

Re-Entrant Speakers and Speaker-Strobes

Re-entrant speakers feature a sealed, high efficiency compression driver that's both weatherproof and vermin proof. This makes them ideal for public places and outdoor areas such as parking garages and transport terminals. All Integrity speakers include a DC Blocking Capacitor that permits electrical supervision of the audio distribution circuit. Models for 25V$_{RMS}$ and 70V$_{RMS}$ circuits are available.

Fire Alarm Appliances, clear lenses, Data Sheet K85001-0317

15/75 cd	30 cd	110 cd	Speaker only	
☐ INT-7AR2	☐ 757-3A-RS25	☐ INT-8AR2	☐ 757-1A-RS25	Speaker-strobe, 25 V, red housing
☐ INT-7AR2W	☐ 757-3A-RS25W	☐ 757-8A-RS25W	☐ 757-1A-RS25W	Speaker-strobe, 25 V, white housing
☐ INT-7AR	☐ 757-7A-RS70	☐ INT-8AR	☐ INT-R	Speaker-strobe, 70 V, red housing
☐ INT-7ARW	☐ INT-3ARW	☐ INT-8ARW	☐ 757-1A-RS70W	Speaker-strobe, 70 V, white housing

Mass Notification Appliances, amber lenses, Data Sheet K85001-0317

☐ 757-7A-RS25WA (12/75 cd)	☐ 757-8A-RS25WA (88 cd)	Speaker-strobe, 25 V, white housing
☐ 757-7A-RS70WA (12/75 cd)	☐ 757-8A-RS70WA (88 cd)	Speaker-strobe, 70 V, white housing

Temporal Horns and Horn-Strobes

During installation, the Horn is configured for steady or temporal tone signal. When temporal output is selected, all Horns on a common two-wire circuit are self-synchronized. Integrity Series Horns emit a low frequency "growling" tone that demands attention. Horns can be configured for either high output (98 dBA) or low output (94 dBA); and are listed for outdoor use.

☐ INT-T (Red)	☐ INT-TW (White)	Temporal Horn	Data Sheet K85001-0341
☐ INT-7AT (Red)	☐ INT-7ATW (White)	Temporal Horn-Strobe, 15/75cd	Data Sheet K85001-0341
☐ INT-8AT (Red)	☐ INT-8ATW (White)	Temporal Horn-Strobe, 110cd	Data Sheet K85001-0341
☐ INT-WBW (Red)	☐ INT-WB (White)	Outdoor Box	Data Sheet K85001-0341

4" Square Box Mount Strobes

405 Series strobes are self-synchronized to flash at one fps across their full operating voltage range. UL 1971 synchronization requirements are achieved when used with the MG1M Signal Master. Strobes must be connected to signal circuits that output a constant (not pulsed) voltage. A diode is used to allow full signal circuit supervision. 405 Series strobes are suitable for outdoor use and installed to a standard four-inch square electrical box.

	☐ 4MS-5AW (White)	Strobe - 15 cd	Data Sheet K85001-0305
☐ 4MS-7AR (Red)	☐ 4MS-7AW (White)	Strobe - 15/75	Data Sheet K85001-0305
	☐ 4MS-3AW (White)	Strobe - 30 cd	Data Sheet K85001-0305
	☐ 4MS-6AW (White)	Strobe - 60 cd	Data Sheet K85001-0305
☐ 4MS-8AR (Red)	☐ 4MS-8AW (White)	Strobe - 110 cd	Data Sheet K85001-0305
☐ CS405-7A-T (15/75 cd)	☐ CS405-8A-T (110 cd)	Strobe - Weatherproof (red)	Data Sheet K85001-0305
☐ 74347U	Outdoor Box for CS model (red)		Data Sheet K85001-0305

Audible Signals

Fire Alarm Bells

Kidde fire alarm bells are of the underdome type with heavy-duty mechanisms. Gongs are made of selected alloy steel to generate the loud, resonant tones. For weatherproof application, optional surface weatherproof backboxes are available.

☐ 323D-10AW (Grey)	☐ 323D-10AWR (Red)	10-inch Single Stroke, Diode — 20-24Vdc	Data Sheet K85001-0333	☐
☐ 439D-6AW (Grey)	☐ 439D-6AW-R (Red)	6-inch Vibrating, Diode — 20-24Vdc	Data Sheet K85001-0333	☐
☐ 439D-8AW (Grey)	☐ 439D-8AW-R (Red)	8-inch Vibrating, Diode — 20-24Vdc	Data Sheet K85001-0333	☐
☐ 439D-10AW (Grey)	☐ 439D-10AWR (Red)	10-inch Vibrating, Diode — 20-24Vdc	Data Sheet K85001-0333	☐

Multiple Tone Signal

The 5530MD-24AW is a weatherproof heavy-duty industrial, tone-selectable, signaling device capable of producing volume-controlled, high-decibel tones. It uses a microprocessor circuit to create 27 distinctive tones. A single tone may be selected by setting a miniature dip switch within the unit.

| 5530MD-24AW | 27-Tone Selectable Signal — 24Vdc | Data Sheet K85001-0415 | ☐ |

Multi-purpose Loudspeaker

The HPSA15 loudspeaker is a high-efficiency double re-entrant loudspeaker that operates within a nominal frequency response range of 400-14,000 Hz, and provides audible output of 120 dB (peak at one meter) at the rated power level. It includes a versatile, three-way, 25/70.7 V line transformer that meets a variety of distributed system needs. The transformer is adjustable by means of a convenient seven-position, watts/impedance selection switch.

| HPSA15R2570 | 15-watt loudspeaker, red | Data Sheet K85001-0591 | ☐ |
| HPSA15G2570 | 15-watt loudspeaker, gray | Data Sheet K85001-0591 | ☐ |

Accessories

Signal Master

The Signal Master is a simple-to-use accessory that adds enhanced features to Genesis and Integrity strobes and Horn-Strobes. It is a dual-purpose module that provides UL 1971 required precision synchronization for connected Integrity and Genesis strobes, and independent control for connected Genesis Horns over a single pair of wires. Two methods of Horn control are available: traditional Horn silence; or, normally-closed contact. Both methods may be used to silence Horns without turning off strobes on the same circuit. Two models are available. The Genesis "piggyback" model doesn't require a separate electrical box. It simply snaps to the back of the first MG1 signal on the circuit. The remote mount model mounts in a North American 2½ inch (64 mm) deep one-gang box.

Snap-on (piggyback) model

Remote 1-gang mount model

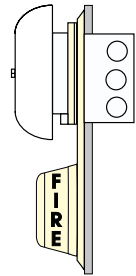| MG1M | Genesis Signal Master – Snap-on (piggyback) | Data Sheet K85001-0545 | ☐ |
| MG1M-RM | Genesis Signal Master – Remote 1-Gang Mount | Data Sheet K85001-0545 | ☐ |

Accessories

Bell/Strobe Plate

The bell/strobe plate is ideal for renovation and retrofit projects, and new construction. It is equipped with an Kidde self-synchronizing strobe and is designed to allow on-site mounting of the 439 series Vibrating Bell, providing instant conversion to Bell/Strobe audible/visual signal appliances. The strobe is designed for 20 to 24Vdc operation and must be connected to signal circuits which output a constant (not pulsed) voltage. A diode is used to allow full signal circuit supervision.

☐ 403-5A-R (15 cd) ☐ 403-7A-R (15/75 cd) ☐ 403-3A-R (30 cd) ☐ 403-8A-R (110 cd)	Data Sheet K85001-0441
403-SB for surface box	Data Sheet K85001-0441

Integrity Lens Marking Kits

Integrity strobes are shipped with wall mount style "FIRE" lens markings. Where ceiling mount, other languages or different lens markings are required, optional LKW and LKC series Lens Marking Kits are available. Lens marking sleeves snap right over the strobe lens providing a quick, easy, change.

☐ LKW-1R (Wall orientation)		"FIRE" (Red)
☐ LKW-1 (Wall orientation)	☐ LKC-1 (Ceiling orientation)	"FIRE"
☐ LKW-2 (Wall orientation)	☐ LKC-2 (Ceiling orientation)	"FEU"
☐ LKW-3 (Wall orientation)	☐ LKC-3 (Ceiling orientation)	"FIRE/FEU"
☐ LKW-4 (Wall orientation)	☐ LKC-4 (Ceiling orientation)	"SMOKE"
☐ LKW-5 (Wall orientation)	☐ LKC-5 (Ceiling orientation)	"HALON"
☐ LKW-6 (Wall orientation)	☐ LKC-6 (Ceiling orientation)	"CO2"
☐ LKW-7 (Wall orientation)	☐ LKC-7 (Ceiling orientation)	"EMERGENCY"
☐ LKW-8 (Wall orientation)	☐ LKC-8 (Ceiling orientation)	"ALARM"
☐ LKW-9 (Wall orientation)	☐ LKC-9 (Ceiling orientation)	"FUEGO"
☐ LKW-10 (Wall orientation)	☐ LKC-10 (Ceiling orientation)	"ALERT"

Mounting Accessories

Integrity Signals
- ☐ INT-SB   Surface Box, Red, Indoor
- ☐ INT-SBW   Surface Box, White, Indoor
- ☐ INT-WB   Weatherproof Box, Red, Surface
- ☐ INT-WBW   Weatherproof Box, White, Surface
- ☐ INT-RR   Four-inch Retrofit Ring, Red
- ☐ 960A-4SF   Flush Box, Indoor

Genesis® Signals
- ☐ 27193-11   Horn-strobe Surface Box, Red, Indoor
- ☐ 27193-16   Horn-strobe Surface Box, White, Indoor
- ☐ MG4RB   Speaker Surface Box, Red, Indoor
- ☐ MG4B   Speaker Surface Box, White, Indoor
- ☐ MG4ERB   MG4 Dual-strobe Format Surface box, Red
- ☐ MG4EWB   MG4 Dual-strobe Format Surface box, White

Horn/siren Combination
- ☐ 349   Weatherproof Backbox

Fire Alarm Bells and CS-405 Series
- ☐ 74347U   Weatherproof Box, Red
- ☐ 449   Weatherproof Backbox, Gray

Genesis MG4B Speaker Surface Box

Hazardous Location Devices

Kidde hazardous location devices provide reliable life safety protection and emergency signaling in areas where atmospheres could become harsh or explosive. All hazardous location devices are UL rated under the full range of classifications set out in the National Electrical Code.

The following classification definitions are an interpretive summary based on the 1996 edition of the National Electrical Code (NEC, NFPA 70). Refer to the latest editions of NFPA 497M, NFPA 70 and the UL Hazardous Location Equipment Directory for current and more detailed information. For more information on NEMA classifications, refer to NEMA Standards Publication No. 250.

Hazardous Location Classifications

Classes

Class I - Hazardous Gases. Class I locations are areas in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

Typical Class I Hazardous Areas
• Spray painting and finishing areas
• Utility gas plants
• Petroleum refining production plants
• Petroleum dispensing locations
• Dry cleaning facilities
• Dip tanks containing combustibles or flammable liquids
• Plant facilities extracting solvents
• Inhalation anesthetics areas
• Process facilities manufacturing pyroxylin type plastics

Class II - Hazardous Dusts. Class II locations represent areas that are hazardous due to the presence of combustible dust.

Typical Class II Hazardous Areas
• Flour mills
• Feed mills
• Grain elevators and grain handling facilities
• Aluminum manufacturing and storage areas
• Magnesium manufacturing and storage areas
• Coal preparation and handling facilities
• Starch manufacturing and storage areas
• Confectionery plants
• Pulverizer sugar and cocoa manufacturing, and storage plants
• Spice grinding and storage plants

Class III - Hazardous Fibers. Class III locations have easily ignitable fibers or flyings present, but not likely to be suspended in air in quantities sufficient to produce ignitable mixtures in the atmosphere.

Typical Class III Hazardous Areas
• Textile mills
• Woodworking plants*
• Furniture manufacturers*
• Cotton gins
• Cotton seed milling plants
• Flax plants
• Carpet manufacturers

  * Except if wood flour (dust), which is Class II Group G, is present

Divisions
The Location Classes are broken down by the NFPA into Divisions 1 and 2, defining different levels of risk. In general, the risk of there being a hazardous presence of flammable/combustible/ignitable materials is higher for Division 1 than for Division 2. The specifics differ between the three classes (I, II and III). Equipment suitable for Division 1 is also suitable for Division 2 locations.

Groups
Class I and II locations are divided by the NFPA into Group designations identifying specific gases, vapors and dusts by characteristic similarities that relate to specific equipment construction requirements. Class III locations are not divided into separate group designations.

Class I Groups
Group A. Atmospheres containing acetylene.

Group B. Atmospheres containing hydrogen, fuel and combustible process gases containing more than 30 percent hydrogen by volume, or gases or vapors of equivalent hazard such as butadiene, ethylene oxide, propylene oxide, and acrolein.

Group C. Atmospheres such as ethyl ether, ethylene, or other gases or vapors of equivalent hazard.

Group D. Atmospheres containing acetone, ammonia, benzene, butane, cyclopropane, ethanol, gasoline, hexane, methanol, methane, natural gas, naphtha (petroleum), propane, or gases or vapors of equivalent hazard.

Class II Groups
Group E. Atmospheres containing combustible metal dusts, including aluminum, magnesium, and their commercial alloys, or other combustible dusts whose particle size, abrasiveness and conductivity present similar hazards in the use of electrical equipment.

Group F. Atmospheres containing combustible carbonaceous dusts, including carbon black, charcoal, coal, or dusts that have been sensitized by other materials so that they present an explosion hazard.

Group G. Atmospheres containing combustible dusts not included in Group E or F, including flour, grain, wood, plastic, and chemicals.

VM SeriesX Head End

Initiating Devices

Notification Appliances

Hazardous Location Devices

Initiating Devices

Rate Compensation Heat Detectors

Surface Mount

Box mount

Series 302 heat detectors are designed for use in normal environments as well as environments where the detectors are subject to weather, moisture (internal condensation), and explosive atmospheres. They are normally-open devices designed to close an electrical circuit upon activation. All models feature rate compensation and are available with either 135 °F (57.2 °C) or 194 °F (90 °C) ratings. They are self restoring, hermetically sealed, shock and corrosion resistant, and are tamperproof.

Sensor's Rated Temperature	Minimum Ambient Air Temperature	Maximum Ceiling Temperature
135 °F (57.2 °C)	-40 °F (-40 °C)	100 °F (38 °C)
194 °F (90 °C)	-40 °F (-40 °C)	150 °F (66 °C)

The sensor's aluminum tube acts as a heat collector when sources of heat radiate directly on the tube. Install these sensors out of direct sunlight and away from radiating heat sources including the direct flow from heaters and heat ducts.

302-AW-135	All-weather Heat Detector - Vertical Mounting FM & UL, 135 °F (57.2 °C)	Data Sheet K85001-0589
302-AW-194	All-weather Heat Detector - Vertical Mounting FM & UL, 194°F (90 °C)	Data Sheet K85001-0589
302-ET-135	All-weather Heat Detector - Vertical, Box Mount (½" NPT), FM & UL, 135 °F (57.2 °C)	Data Sheet K85001-0589
302-ET-194	All-weather Heat Detector - Vertical, Box Mount (½" NPT), FM & UL, 194°F (90 °C)	Data Sheet K85001-0589
302-EPM-135	Heat Detector - Explosionproof Mounting UL (Not FM approved), 135 °F (57.2 °C)	Data Sheet K85001-0589
302-EPM-194	Heat Detector - Explosionproof Mounting UL (not FM approved), 194°F (90 °C)	Data Sheet K85001-0589
AP-P	Adaptor plate for mounting 302 and 302-AW to any 3" box or 4" octagon outlet box	Data Sheet K85001-0589
JALX11	Explosion proof outlet body with cover - Killark	Data Sheet K85001-0589

Explosionproof/weatherproof Manual Stations

MPSR Series explosionproof/weatherproof manual pull stations are noncoded fire alarm stations solidly constructed of die-cast material. They are rated for Class I Group B (hydrogen) C & D, Class II Groups E. F, G, Class III environments, and are rated NEMA 4X for outdoor use. Key and screw reset models feature terminal connections and come complete with backbox.

Hex Screw Reset	Cat 45 Key Reset	Manual Stations	Data Sheet K85001-0588
☐ MPSR1-DHTWX-GE	☐ MPSR1-D45WX-GE	Explosionproof Single-action, SPST with backbox.	
☐ MPSR1-SHTW-GE	☐ MPSR1-S45W-GE	Weatherproof Single-action, SPST with backbox.	
☐ MPSR1-DHTW-GE	☐ MPSR1-D45W-GE	Weatherproof Single-action, DPDT with backbox.	
☐ MPSR2-SHTW-GE	☐ MPSR2-S45W-GE	Weatherproof Double-action, SPST with backbox.	
☐ MPSR2-DHTW-GE	☐ MPSR2-D45W-GE	Weatherproof Double-action, DPDT with backbox.	
☐ MPSR2-SHTW-GE-NYW	☐ MPSR2-S45W-GE-NYW	Weatherproof Double-action, SPST with backbox, NYC white stripe.	

For French markings add *-F* to the suffix of the model number. For bilinguial French/English markings add *-B* to the suffix of the model number.

MPSR-LP	Double action cover for explosionproof manual stations	
MPSRGR10	Replacement glass rods for MPSR stations (10 pack).	
276-K1	Cat 45 Key (each)	

Explosionproof Smoke Detector

Model 30-3013 detectors are high performance smoke detectors built for use in hazardous locations. They are corrosion-resistant and feature a non-conducting aluminum alloy retaining ring that protects the detector sensor against the effects of explosions and other catastrophic events. The retaining ring mounts securely to a companion junction box, which offers several common port configurations for conduit connection. Together, the ring and box provide a sturdy protective shell for the detector head.

| 30-3013A1N12F | Explosionproof Smoke Detector | Data Sheet K85001-0645 | |

Notification Appliances

Hazardous Location Strobes

- Class I, II, or III locations

116DEGEX-FJ hazardous location strobes are life safety signaling appliances designed for installation in hazardous environments. State-of-the-art technology provide for high visual output and low maintenance. The 116DEGEX-FJ has negligible in-rush current. When pendant, wall or ceiling mounted, the 116DEGEX-FJ meets or exceeds the requirements of UL 1971 Signaling Appliance for the Hearing Impaired.

116DEGEX-FJ	Explosionproof Strobe, Diode Polarized	Data Sheet K85001-0624	
116EX-B	Wall bracket mounting elbow	Data Sheet K85001-0624	
116EX-C	Ceiling/wall mounting module	Data Sheet K85001-0624	
116EX-P	Pendant mounting module - 3/4" (19 mm) NPT	Data Sheet K85001-0624	
116-GRD	Lens Guard	Data Sheet K85001-0624	

Hazardous Location Bells

- Class I groups B, C and D locations
- Class II groups E, F and G locations
- Class III hazardous locations, for Divisions 1 and 2

430D series of hazardous location bells are diode-polarized, heavy duty fire bells for use in life safety applications where a diode supervised signal is required. They can be mounted to any solid surface using two 3/8 inch (10 mm) bolts and the supplied mounting brackets or to a rigid conduit. The integral explosion-proof housing is mechanically terminated to accept a standard 3/4 inch -14 National Pipe Taper (NPT) nipple.
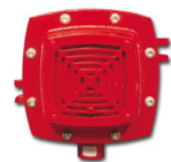
| ☐ 439DEX-6AW (6") | ☐ 439DEX-8AW (8") | ☐ 439DEX-10AW (10") | Bell – 24 Vdc | Data Sheet K85001-0399 | |
| ☐ 438DEX-6N5 (6") | ☐ 438DEX-8N5 (8") | ☐ 438DEX-10N5 (10") | Bell – 120 Vac | Data Sheet K85001-0399 | |

Hazardous Location Horns

- Class I groups B, C and D locations
- Class II groups E, F and G locations
- Class III hazardous locations, for Divisions 1 and 2

888D and 74339U hazardous location horns are diode-polarized, heavy duty, high decibel vibrating horns intended for use in life safety systems in hazardous (classified) locations. These horns may be mounted to any solid surface using two bolts. Each unit is supplied with a sealing fitting for a 3/4 inch -14 National Pipe Taper (NPT) nipple, and wire leads for the electrical connection to the life safety system notification appliance circuit.

| ☐ 888D-N5 (120 Vac) | ☐ 74339U (24 Vdc) | Horn – 120 Vac | Data Sheet K85001-0397 | |

VM SeriesX Head End

Initiating Devices

Notification Appliances

Hazardous Location Devices

Door Holders & Relays

Door Holders

Electromagnetic Door Holders

Electromagnetic door holders keep doors open until signaled by the fire alarm system, a heat detector, a smoke detector, or an electrical switch. Door holders should be installed wherever doors may be effectively used to confine smoke and fire, or where the release of a self-closing door from a remote location is required. Fail-safe operation is an inherent feature of these door holders. If power fails, doors are released automatically, but may be opened or closed manually at any time. All units are free of moving parts, are self-contained, and require no maintenance. Door holders have a holding force of approximately 15-25 Lbf (66-111N).

24 Vac 60 Hz
24 Vdc
120 Vac 60 Hz

☐1501-AQN5 (Single Door)	☐1502-AQN5 (Double Door)	Floor Mounted	Data Sheet E85001-0421
☐1504-AQN5 (Long Catch Plate)	☐1505-AQN5 (Short Catch Plate)	Flush Wall Mounted	Data Sheet E85001-0421
☐1508-AQN5 (Surface)	☐1505-AQN9 (Completely flush)	Wall Mounted	Data Sheet E85001-0421
☐1500-1 (1.5" Extension)	☐1500-2 (2.5" Extension)	Catch Plate	Data Sheet E85001-0421
☐1500-7 (5.25 to 7.5" Extension)	☐1500-12 (7.5 to 12" Extension)	Catch Plate	Data Sheet E85001-0421
☐CS2595-5 (short)	☐CS2598-5 (long)	Replacement Armature	Data Sheet E85001-0421

Relays

Four-Voltage SPDT/DPDT Control Relays

MR Series multi-voltage control relays are ideal for applications where local contacts are required for system status, remote contacts, or for control of electrical loads and general purpose switching. They are suitable for use with HVAC temperature control, fire alarm, security, energy management, and lighting control systems. Relays provide 10-Amp contacts, which may be operated by one of four input control voltages. Each relay position contains a red LED that indicates the relay coil is energized. Relays may be snapped apart from a standard four-module assembly and used independently.

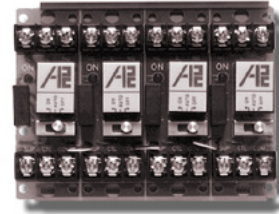|			
☐MR-101/T (with mounting hardware)	☐MR-101/C (in metal enclosure)	Single SPDT relay	Data Sheet E85300-02762
☐MR-104/T (with mounting hardware)	☐MR-104/C (in metal enclosure)	4-position SPDT relay	Data Sheet E85300-02762
☐MR-201/T (with mounting hardware)	☐MR-201/C (in metal enclosure)	Single DPDT relay	Data Sheet E85300-02762
☐MR-204/T (with mounting hardware)	☐MR-204/C (in metal enclosure)	4-position DPDT relay	Data Sheet E85300-02762

Heavy Duty DPDT Power Relays

MR-199 heavy duty power relays are designed for control applications where 30-Amp DPDT contacts are required. Two models are available: a 115Vac coil and a 24Vdc coil, each of which may be mounted in a rugged steel enclosure.

☐MR-199X-13 (relay only)	☐MR-199X-13/C (in metal enclosure)	Power Relay — 24 VDC	Data Sheet E85300-02765
☐MR-199AX-14 (relay only)	☐MR-199AX-14/C (in metal enclosure)	Power Relay — 120 VDC	Data Sheet E85300-02765

SPDT Relays

Single-pull/double-throw relays are ideal for applications where local or remote contacts are required for control of electrical loads. They are suitable for use with HVAC, temperature control, fire alarm, security, energy management, and lighting control systems. Each relay position contains a high-intensity LED which, when illuminated, indicates the relay coil is energized. Individual relay circuits may be snapped apart from standard four- or eight-position modules, and are also available in a single-circuit configuration. The common power to each relay position is bussed on the printed wiring board, which permits power to be connected only once per multi-position module.

Single-Voltage Manual Override Relays

MR-600 series relays provide SPDT, 10-Amp contacts with manual override capability by means of an ON-AUTO-OFF switch. The relay requires a 24Vac or 24Vdc power source supplied by the controlling system. With the switch in the ON position the power relay is energized. With the switch in the AUTO position the relay is allowed to operate as signaled by the controlling system. With the switch in the OFF position the relay cannot be energized.

☐MR-601/T (with mounting track)	☐MR-601/S (with mounting spacers)	Single SPDT relay	Data Sheet E85300-02761
☐MR-604/T (with mounting track)	☐MR-604/S (with mounting spacers)	4-position SPDT relay	Data Sheet E85300-02761
☐MR-608/T (with mounting track)	☐MR-608/S (with mounting spacers)	8-position SPDT relay	Data Sheet E85300-02761

Three-Voltage Control Relays

MR-800 Series relays provide SPDT 10-Amp contacts that may be operated by one of three input control voltages: 24Vdc, 24Vac or 115Vac.

☐MR-801/T (with mounting track)	☐MR-801/S (with mounting spacers)	Single SPDT relay	Data Sheet E85300-02763
☐MR-804/T (with mounting track)	☐MR-804/S (with mounting spacers)	4-position SPDT relay	Data Sheet E85300-02763
☐MR-808/T (with mounting track)	☐MR-808/S (with mounting spacers)	8-position SPDT relay	Data Sheet E85300-02763

Four-Voltage Control Relays

MR-700 Series relays provide SPDT 10-Amp contacts that may be operated by one of four input control voltages: 12Vdc, 12Vac, 24Vdc, or 24Vac.

☐MR-701/T (with mounting track)	☐MR-701/S (with mounting spacers)	Single SPDT relay	Data Sheet E85300-02764
☐MR-704/T (with mounting track)	☐MR-704/S (with mounting spacers)	4-position SPDT relay	Data Sheet E85300-02764
☐MR-708/T (with mounting track)	☐MR-708/S (with mounting spacers)	8-position SPDT relay	Data Sheet E85300-02764

Three-Voltage Encapsulated Control Relays

PAM-1 relays provide 10-Amp Form C contacts. The relay may be energized by one of three input voltages: 24Vac, 24Vdc, or 115Vac. The PAM-1 may be mounted with double-sided adhesive tape, a self-tapping screw, or loosely placed in a backbox.

PAM-1	Encapsulated SPDT relay	Data Sheet E85300-02766

Door Holders & Relays

Value, efficiency, and a legacy of fire protection innovation

When building owners and designers do business with Kidde, their investment is underwritten by a 100-year history of dedication to the fire alarm industry. That's why today architects and engineers agree that when it comes to protecting people and property, Kidde life safety systems remain the technology of choice.

Our strength is in our dealer network — the people and organizations we entrust with the technology that has charted the course of detection and alarm for decades. Kidde Engineered Systems Dealers are independent contractors who add value to the Kidde life safety solution. They enjoy exclusive access to products, custom design innovations, and factory training — and they are adept at ensuring that each proposal is strong and competitive.

These strengths set Kidde installations apart, and have earned this brand a special place among life safety solutions available today.

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