WAYNE J.
GRIFFIN ELECTRIC
INC.

November 17, 2006

PROJECT:	Belmont Market 25 Pier Market Place Narragansett, RI 02882
OWNER:	Gilbane Development Company 7 Jackson Walkway Providence, RI 02903
GENERAL CONTRACTOR:	Gilbane Development Company 20 Narragansett Avenue Unit 20B Narragansett, RI 02882
ARCHITECT:	Blount Bennett Architects Ltd 37 N. Blossom Street East Providence, RI 02914
ELECTRICAL ENGINEER:	S.B. Sager & Associates 60 Brooks Drive – Suite 102 Braintree, MA 02184
ELECTRICAL CONTRACTOR:	Wayne J. Griffin Electric, Inc. 116 Hopping Brook Road Holliston, MA 01746

We herein submit the following electrical equipment on the Belmont Market, Project for your approval:

Fire Alarm System

PROJECT: Belmont Market

SUBMITTAL: Fire Alarm System

WAYNE J. GRIFFIN ELECTRIC, INC
116 HOPPING BROOK ROAD
HOLLISTON, MA 01746

Reviewed By: Matthew O'Toole

Date: November 17, 2006

SINCE 1966

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GAMEWELL FIRE ALARM SYSTEM
PIER MARKET
NARRAGANSETT, RI

PREPARED FOR:
WAYNE J. GRIFFIN ELECTRIC
116 HOPPING BROOK ROAD
HOLLISTON, MA 01748
ATTN: MATT FOHLIN

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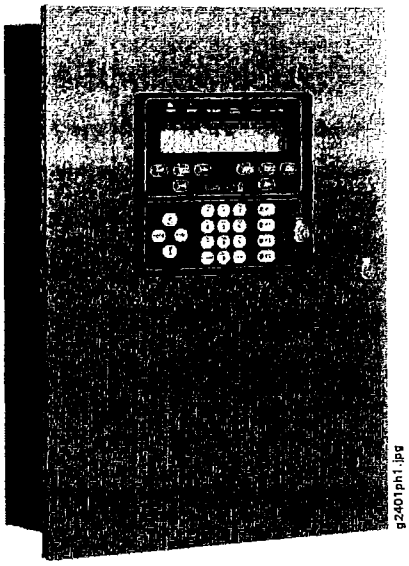
GAMEWELL FIRE ALARM SYSTEM
PIER MARKET
NARRAGANSETT, RI

ITEM	QTY.	CAT#	DESCRIPTION	DATA SHEET#
1	1	IF602-126R	ANALOG/ADDRESSABLE FACP	CS-2401
	1	31079	CLASS A MODULE	CS-2401
	1	31077	MASTER BOX MODULE	CS-2401
2	1	RAN2-RCF	LCD ANNUNCIATOR W/CONTROLS	CS-2025
	1	RAN2-BB	BACK BOX	CS-2025
3	13	MS-95 DL	ADDRESSABLE PULL STATION (DOUBLE ACTION/KEY-RESET)	CS-2487
4	2	XP-95-T	ANALOG HEAT DETECTOR	CS-2055
	2	XP-95-B6 EZ	DETECTOR BASES	CS-2055
	2	30203	REMOTE LED	4062
5	1	XP-95P	ANALOG SMOKE DETECTOR	CS-2054
	1	XP-95-B6 EZ	DETECTOR BASE	CS-2054
6	2	CZI-95	ADDRESSABLE ZONE MODULE (SPRINKLERS)	CS-2043
	1	CZI-95	ADDRESSABLE ZONE MODULE (ANSUL)	CS-2043
7	2	XP-95-PD	DUCT DETECTOR HOUSING W/ANALOG SMOKE DETECTORS	CS-2049
	2	30007-02	DUCT TEST STATION	CS-2049
	2	70896-05	SAMPLING TUBES	CS-2049
8	1	RCE-95	CONTROL MODULES (FAN SHUTDOWN)	CS-2045
	1	RCE-95	CONTROL MODULES (GAS SHUT OFF)	CS-2045
	1	RCE-95	CONTROL MODULES (FACP/FAN BYPASS)	CS-2045
9	2	PID-95P	MONITOR MODULES (DUCT TEST STATIONS)	CS-2044
	2	PID-95P	MONITOR MODULES (FACP/FAN BYPASS)	CS-2044
10	5	XP95-LI	ISOLATION MODULES	CS-2051
11	1	FF8	EXPANDER POWER SUPPLY	CS-2282
	2	B12V7	STANDBY BATTERIES	CS-2282
	1	31076	CLASS A - 4 CKTS	B-W479-4
12	31	72028	HORN STROBES MULTI CANDELA	CS-2246
13	5	72035	STROBES MULTI CANDELA	CS-2244
14	11	TII-317B	LIGHTNING ARRESTOR (FACP)	TII
15	2	DCMAXR	RED BEACON	WHEELOCK
16	2	ASLA-1146	STANDBY BATTERY 26 AH	POWER PATROL
	1	BCA	BATTERY CABINET	SPACE AGE

BATTERY CALCULATIONS
SERVICE AND WARRANTY
WIRING DIAGRAM

IdentiFlex 602

Analog Addressable Control Panel



Description

The IdentiFlex 602 (IF602) is ideally suited for small- to medium-sized installations of commercial, institutional, and industrial life-safety applications. The IF602 offers all the features of today's most advanced life safety systems. The integration of analog and addressable hardwired circuits allows system engineers to customize panels and maximize efficiency for a given application.

The IF602 can monitor and control up to 252 intelligent analog addressable input/output points. The interactive operator's display uses LED prompting for ease of programming and user operation. The alphanumeric display and keypad simplify field programming, or download programming from a Windows®-based application.

The IF602's housing was designed to be both aesthetically pleasing and functionally sound. The cabinet is designed to fit between studs for semi-flush mounting. The compact design and key-activated dead-front construction enables secure routine maintenance of the system. Access to system function keys is limited by a key switch. Multiple levels of password protection prohibit unauthorized use. The circuit boards are mounted on a removable chassis, and are designed with pluggable terminal strips for ease of installation and service.

Operator's Display

The IF602's operator's display is the source of all user access to the system. The display provides all of the necessary keys and annunciation points to maintain and monitor the system. Alarm, supervisory, and trouble conditions are all indicated on the operator's display by dedicated LEDs and an internal sounder. The Acknowledge, Reset, and Signal Silence keys are located directly below the 4X40-character backlit alphanumeric display. All system functions and operational logic can be programmed directly from the front panel in the field. The IF602 display includes four user-programmable function keys.

Analog Addressable Signaling Line Circuits

The IF602 analog interface module provides Signaling Line Circuits (SLC), loop circuits that can monitor and control up to 126 analog/addressable devices on each power-limited loop, for a total of 252 analog points in a dual-loop system. Loop wiring is not polarity sensitive.

Features

- One or two Signaling Line Circuits (SLC), up to 252 points.
- Polarity-insensitive SLC circuit wiring.
- SmartStart™ self-programming logic.
- Downloadable or front-panel programmable.
- Password protected.
- Approved for Agent Releasing and Supervisory Service.
- Fully digital SLC protocol.
- SmartLink™ peer-to-peer networkable.
- 1000-event history log.
- Automatic drift compensation.
- Coded signaling capability.
- Adjustable sensor sensitivity and temperature settings.
- Supervisory service.
- Style 6 (Class A) or Style 4 (Class B) SLC.
- Four Style Y (Class B), or two Style Z (Class A) notification appliance circuits (NACs).
- Semi-flush mounting (between 16" studs).
- 160-character display.
- UDACT compatible.
- Built-in strobe and horn synchronization.

Listings

- UL Listed.

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Each SLC loop has a dedicated microprocessor that simultaneously communicates with connected field devices and the main CPU.

The IF602 uses the advanced XP95 fully digital communications protocol to improve the speed and accuracy of event reporting. The communications protocol provides for alarm verification per detector, detector adjustability and compensation, adjustable analog heat detector range (131°F to 194°F, 55°C to 90°C), circuit isolation, and priority interrupts. Priority interrupts allow contact-type devices such as manual fire alarm stations to interrupt the polling cycle and transmit their addresses at any time during a polling sequence.

The fully digital protocol allows the IF602 to operate on most types of field wiring, greatly expanding its use in retrofit applications. Consult the factory for specific wiring requirements.

IF602 Power Supply

The IF602 power supply is a fully regulated 8 Amp supply that furnishes system operating and signaling power. It is equipped with a battery charger which maintains the secondary power source. The power supply is monitored by the main CPU, ensuring that adequate power levels are available. The power supply design allows for high efficiency while providing precise power output. The battery charger maintains batteries up to 26 AH. The supply powers four on-board NACs (two Class A) with multiple built-in synchronization protocols.

I/O Devices

Addressable control output devices are the interface between analog circuits and building functions. The outputs are controlled by Control By Event (CBE) software within the IF602, and can be programmed to respond to any event. The control devices can also be used as supervised remote signaling circuits.

The IF602, with Gamewell's complete line of 600 Series devices, provides a foundation for system design. The IF602's RS-232 output expands system monitoring and control capabilities.

Remote Display and Control

Add serial annunciators to display system activity and control. Serial annunciator drivers are available in 16-point increments and are an ideal interface to graphic annunciators. Switches can be used for Acknowledge, Reset, Signal Silence, Drill, etc., to customize the remote status control network.

An alphanumeric display can also be used for remote status and control. The alphanumeric display is designed to communicate over the serial communications network.

The IF602 can communicate locally or remotely with a printer to document system activity.

See the RAN/SAN data sheet (CS-2025) for complete annunicator details.

Applications

The IF602 Analog Addressable Control Panel is designed for new or retrofit small- to mid-sized projects that require state-of-the-art life-safety systems. The embedded CPU offers users unrivaled reliability without sacrificing flexibility or value.

Specifications

Common control

Quiescent current: 0.125 A.

Alarm current: 0.171 A plus signaling circuit power, plus 0.002 A for master box, or plus 0.022 A for reverse-polarity.

Input power: 120 VAC, 3.0 A.

Auxiliary output

S+/S–, A+/A–, 2.0 A maximum.

Common relays: 1.0 A @ 30 VDC, or 0.5 A @ 250 VAC.

Notification appliance circuits

Circuits: four Class B, two Class A.

Output: 3.0 A maximum @ 24 VDC per circuit. Maximum 8.0 A total for all circuits.

Analog SLC:	IF602/126	IF602/252
Quiescent current:	0.045 A	0.055 A
Alarm current:	0.045 A	0.055 A

Panel dimensions

Standard cabinet: 20.0" H x 14.0" W x 4.5" D (cm: 50.8 H x 35.56 W x 11.43 D).

XL cabinet: 30.0" H x 22.0" W x 5.5" D (cm: 76.2 H x 55.88 W x 13.97 D).

Battery storage dimensions

Standard cabinet: 6.0" H x 9.0" W x 4.5" D (cm: 15.24 H x 22.86 W x 11.43 D).

XL cabinet: 14" H x 22.0" W x 5.5" D (cm: 35.56 H x 55.88 W x 13.97 D).

Relative humidity

93% noncondensing.

Temperature rating

32°F – 120°F (0°C – 49°C).

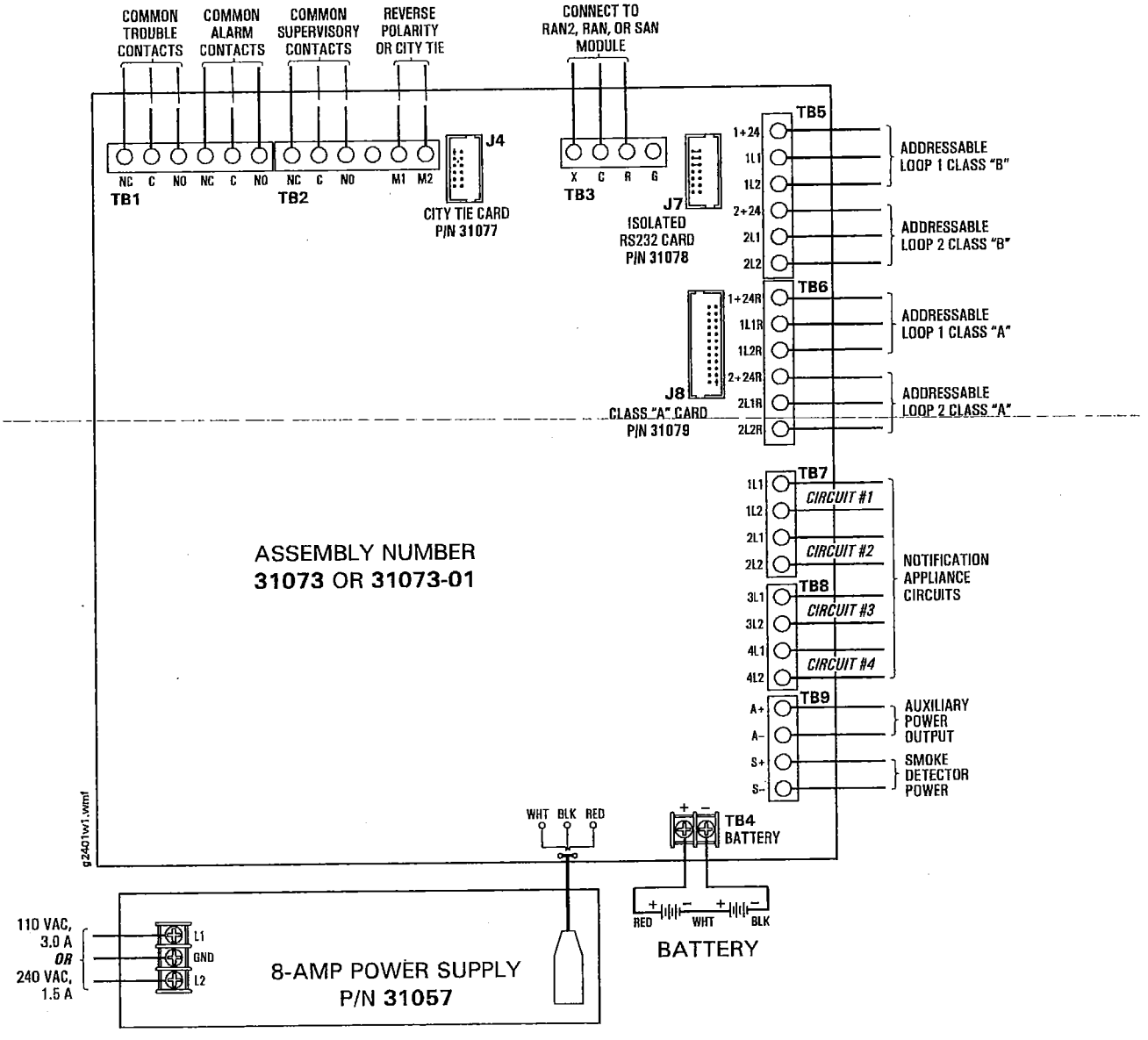
With compatible analog sensors and addressable input and control interface devices, and its remote status and control capabilities, the IF602 provides system engineers with all the tools necessary to design effective system solutions for any application.

The IF602 can also control bulk fire-suppressant materials releasing. The IF602 is capable of releasing the following NFPA types of suppressant: 13 Sprinkler, 15 Water Spray, 11 Low-Expansion Foam, 16 Water Foam, 17 Dry Chemical, and 2001 Clean Agent.

Architectural/Engineering Specifications

The control panel furnished and installed shall be capable of supporting 252 addressable devices and two analog loops. The panel shall utilize a fully digital Signaling Line Circuit (SLC) protocol. The panel shall contain four on-board Notification Appliance Circuits (NACs) that support multiple synchronization protocols. The panel shall utilize a 160-character Liquid Crystal Display (LCD) and a 1,000-event history log. The panel shall be a Gamewell IF602.

Wiring Diagram



Ordering Information

IF602-126R	IF602 analog addressable system, consisting of: IF602 common control, 8 Amp main power supply, **one analog circuit** module (126 analog addressable points), and standard cabinet assembly (CAB-602R).
IF602-126XL	126 point/one SLC IF602 (refer to IF602-126R above) in extra-large housing, allowing space for battery storage. Cabinet dimensions: 30.0" H x 22.0" W x 5.5" D (76.2 cm H x 55.88 cm W x 13.97 cm D).
IF602-252R	IF602 analog addressable system, consisting of: IF602 common control, 8 Amp main power supply, **two analog circuits** module (252 analog addressable points), and standard cabinet assembly (CAB-602R).
IF602-252XL	252 point/two SLC IF602 (refer to IF602-252R above) in extra-large housing, allowing space for battery storage. Cabinet dimensions: 30.0" H x 22.0" W x 5.5" D (76.2 cm H x 55.88 cm W x 13.97 cm D).
72214	*Installation and Maintenance Manual — IdentiFlex 602.*
30177	3.9K ohm, 0.5 watt end-of-line resistor.
31077	**CTM-602**, city-tie/remote signaling module, for 602 Series panels.
31078	**ISO-232**, RS-232 serial-port isolator module, for 602 Series panels.
31079	**CLA-602**, Class "A" adapter module for SLC, 602 Series panels.

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Gamewell WORLDWIDE

RAN2, RAN2-RC, 600 Series Remote Annunciator

Description

The 600 Series remote annunciator (RAN2 and RAN2-RC) provide remote display and control capabilities. Each RAN device is connected to the main 600 Series fire alarm panel via a serial communications port. Each device is capable of interpreting the instructions from the Main CPU, initiating its own programmed response, and re-transmitting the instructions to the next device.

The Gamewell 600 systems can accommodate up to 64 devices connected to the serial communications port. In addition to the Remote Annunciator (RAN2), these devices include serial annunciator drives (SAN) and Remote Printer Interfaces (RPI). This combination of devices make up the Gamewell Status Control Network. Since each device contains its own microprocessor, each can be programmed independently. A series of devices can be programmed directly over the network from a single device, saving valuable installation time.

The Remote Alphanumeric Display (RAN2) is fully supervised and has dual Serial Ports for Network Connection. The RAN2 family will mimic the user text from the main system. The Remote Control version (RAN2-RC) has 7 switches for: Remote Acknowledge, Reset, Signal Silence, Lamp Test, Display 1st Event, Display Next Event, Display Previous Event.

The basic RAN2 is provided with a scroll switch only. The scroll switch is used to review multiple events on the system. The remote control versions are provided with a 7 position tactile switch bank and 8 LED's for system annunciation. The switches are provided for remote control of the connected system. A Key Switch is provided for enabling and disabling of the tactile switches to prevent unauthorized operation.

The Status Control Network is connected to the main 600 Series control panel via an RS-232 data communications line. The SIM-232 module is used to provide an isolated RS-232 output from the main CPU of the 620, 630, 632 and 650 system panels. The IF610 comes with its own built-in RS-232 port.

Applications

Remote Alphanumerics are ideal wherever text based annunciation of system activity is required. Since the RAN can also control system activity, there is no need for additional hardware to complete a status and command center for a system of any size.

RAN2-RCF

Approvals

UL Listed, CSFM, MEA, FM Approved

Features

- LCD Alphanumeric Display 4 Line x 40 Character
- Up to 64 Devices Supported on a Single 600 Series Control Panel
- Windows-based Field Programing
- Dual Optically Isolated Serial Ports
- Microprocessor Based
- Supervised
- Allows Remote System Control
- Surface or Flush Mounting
- 19" Rack Mount Versions
- Adjustable Viewing Angle
- Backlit LCD

MS95-L Series

Addressable XP95 Manual Pull Stations

Description

The Gamewell MS95-L Series is a state-of-the-art, single- or dual-action XP95 pull station that includes an XP95 addressable interface for any Gamewell 600 Series Fire Alarm Control Panel (FACP). Because the MS95-L Series is addressable, the FACP can display the exact location of the activated manual station. This leads fire personnel quickly to the location of the alarm.

Operation

Pushing in, then pulling down on the handle causes it to latch in the down/activated position. Once latched, the word "ACTIVATED" (in bright yellow) appears at the top of the handle, while a portion of the handle protrudes from the bottom of the station. To reset the station, simply unlock the station with the key and pull the door open. This action resets the handle; closing the door automatically resets the switch. Each manual station, on command from the control panel, sends data to the panel representing the state of the manual switch. DIP switch is used to set addresses.

Construction

Shell, door, and handle are molded of durable LEXAN® (or polycarbonate equivalent) with a textured finish.

Installation

The MS95-L Series will mount semi-flush into a single-gang, double-gang, or standard 4" (10.16 cm) square electrical outlet box, or will surface mount to the Model SB-IO surface backbox. If the MS95-L Series is being semi-flush mounted, then the optional trim ring (BG-TR) may be used. The BG-TR is usually needed for semi-flush mounting with 4" (10.16 cm) or double-gang boxes (not with single-gang boxes).

Features

- Maintenance personnel can open station without causing an alarm condition.
- Built- in bicolor LED, which is visible through the handle of the station, flashes in normal operation and latches steady read when in alarm.
- Handle latches in down position and the word "Activated" appears to clearly indicate the station has been operated.
- Captive screw terminals wire-ready for easy connection to SLC loop (accepts up to 12 AWG/3.25 mm² wire).
- Semi-flush, mounts to a standard single gang (2.125" [5.3975] minimum depth), double gang, or 4" (10.16 cm) square electrical box.
- Smooth dual-action design.
- Within ADA 5 lb. pull force.
- Highly visible.
- Attractive shape and textured finish.
- Key reset.
- Includes Braille text on station handle.
- Optional trim ring (BG-TR).
- Meets UL 38, standard for manually actuated signalling boxes.
- Up to 126 stations per XP95 loop.

Listings

Listings and approvals below apply to the basic MS95-L Series. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL Listed: file S281.

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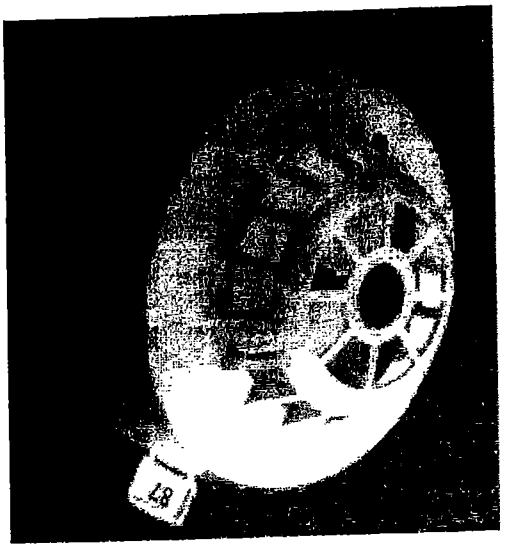
Gamewell WORLDWIDE

XP95-T Analog Addressable Thermal Sensor

Description

Gamewell's XP95-T Analog Addressable Thermal Sensors are designed to provide the highest effectiveness by utilizing the latest technology. The sensor is designed for operation with Gamewell's Analog Addressable control panels. The Series XP95-T Thermal Sensor is capable of digitally transmitting not only its address but also the chamber's analog temperature value to the FACP for analysis.

Thermal sensors are readily distinguished from smoke sensors by observing the open webs in the housing designed to allow the free movement of air around the exposed thermistor.



Operation

The XP95-T Thermal Sensor constantly monitors its sensing element as well as its internal electronics. The results are then digitally reported along with the unit's address through the integral communications electronics located in the sensor head. The Thermal Sensor monitors temperature by using a single thermistor network which provides a voltage output proportional to the external air temperature. This signal is processed and conditioned by an on-board advanced technology ASIC that digitally transmits the ambient temperature data to the panel when interrogated.

Trouble and Alarm conditions of the XP95 Sensors are actually determined at the control panel. The status information of each sensor is analyzed for off normal conditions by the control panel. If the sensor reports a condition that matches its programmed trouble signature, the FACP will report that the sensor is in trouble and will follow its programmed response sequence. Likewise, if the status reported matches the alarm signature, the FACP will follow the programmed alarm response for the specific device in alarm. When a sensor is in alarm, the integral LED in the sensor's housing will light steady.

The XP95-T Thermal Sensor is calibrated to return a normal air temperature analog value at 25 ° C. The device is designed to be connected to a two wire loop circuit carrying both data and a 17V to 28V DC supply voltage, and is insensitive to loop connection polarity. A remote LED indicator can be connected. The device is compatible with point or group addressable relay and sounder bases.

Approvals

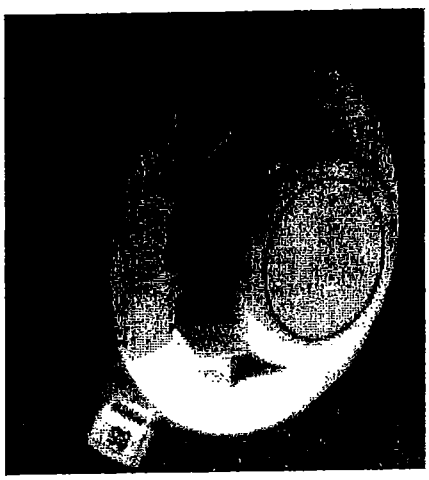
UL Listed, CSFM, MEA, FM Approved

Features

- Compatible with Gamewell's 600 Series Analog Addressable Control Panels
- Fits 4", 6" or 6" low & ultra low profile & E-Z fit bases
- Audible alarm sounder base
- 4 wire relay base
- Address is stored in the sensor base
- Address is set by *XPert Addressing Card*
- Two-color status LED
- Fixed point or Rate-of-Rise functions
- Timed temperature increase causes an alarm
- Thermal adjustability programming
- Optional remote LED

Gamewell WORLDWIDE

XP95-P
Analog Addressable Photoelectric Smoke Sensor



Description

Gamewell's Analog Addressable Photoelectric Sensor (XP95-P) is designed to provide the highest effectiveness by utilizing the latest technology. The sensor is designed for operation with Gamewell's Analog Addressable control panels. The Photoelectric Sensor is capable of digitally transmitting not only its address but also the chamber's analog value to the FACP for analysis. The Photoelectric Sensor is distinguished by the clear status LED, which flashes red briefly when the device is polled and turns on steady red when the device is in alarm.

Operation

The XP95-P photoelectric sensor constantly monitors its sensing chamber or element as well as its internal electronics. The results are then reported along with the unit's address through the integral communications electronics located in the sensor head. The XP95 Photoelectric sensor utilizes a patented smoke chamber and infrared smoke sensing design. The Infrared emitter generates a burst of light every second, or in response to direct interrogation. In clean air the photo diode receives no light from the emitter because of the arrangement of the chamber. When smoke enters the chamber it scatters light from the emitter onto the photo diode receptor proportionally to the smoke characteristics and density; as the smoke content in the chamber increases the signal from the photo diode receptor increases. This information is processed and conditioned by an on-board advanced technology ASIC and digitally transmitted to the FACP.

Trouble and Alarm conditions of the XP95 Sensors are actually determined at the control panel. The status information of each sensor is analyzed for off normal conditions by the control panel. If the sensor reports a condition that matches its programmed trouble signature, the FACP will report that the sensor is in trouble and will follow its programmed response sequence. If the status reported matches the alarm signature, the FACP will follow the programmed alarm response for the specific device in alarm. When a sensor is in alarm, the integral LED in the sensor's housing will light steady.

The XP95-P photoelectric device is designed to be connected to a two wire SLC carrying both data and a 17V to 28V DC supply voltage, and is insensitive to loop connection polarity. A remote LED indicator may be connected. The device is compatible with point or group addressable relay and sounder bases.

Approvals

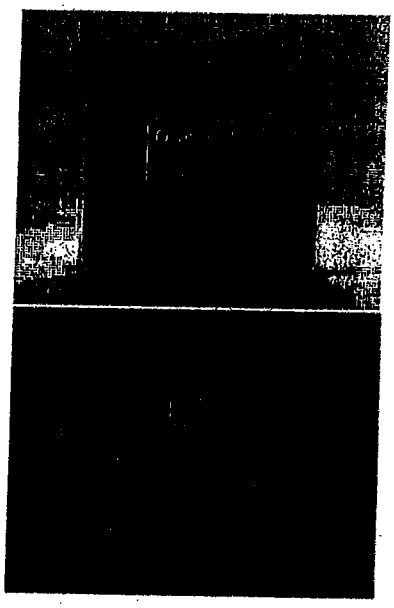
UL Listed, CSFM, MEA, FM Approved

Features

- Compatible with Gamewell's 600 Series Analog Addressable Control Panels
- Fits 4", 6" or 6" low & ultra low profile E-Z fit bases
- Audible alarm sounder base
- 4-wire relay base
- Address is stored in the sensor base
- Address is set by *XPert Addressing Card*
- Two-color status LED
- Infrared smoke sensing design
- Continuous communications
- Optional remote LED

Gamewell WORLDWIDE

CZI-95 Conventional Zone Interface



Description

Gamewell's Conventional Zone Interface (CZI-95) provides the interface between the FACP's analog circuits and contact devices or conventional-type smoke detectors. The Conventional Zone Interface device is capable of monitoring up to 25 conventional-type detectors. Conventional Zone Interface modules are available for either Style B, C, D or E wiring. The Conventional Zone Interface device is designed for surface or flush mounting and are provided with an LED for annunciation.

Operation

The Conventional Zone Interface is capable of monitoring up to 25 conventional smoke detectors via a 3-wire circuit. The CZI-95 acts as a remotely located conventional zone. The CZI-95 provides a supervised circuit for connection to conventional-type devices such as smoke detectors or contact devices. If any detector on the CZI-95's circuit goes into alarm, the CZI-95 will report its address to the main control panel via the analog circuit and initiate the programmed response. The LED on the conventional detector and the CZI-95 will illuminate, indicating that the device is in alarm.

If a trouble is detected on the monitored circuit, the CZI-95 will report the trouble condition to the FACP. The CZI-95 will detect troubles from either the field wiring or a connected device.

Programming

Programming of the CZI-95 is accomplished through the setting of a single DIP switch easily accessible on the device's printed circuit board.

Mounting

The CZI-95 is designed to mount in a standard 4 11/16" electrical backbox. The CZI-95 should be located in easily accessible and visible locations so that the built-in LED may be visible for quick indication.

Approvals

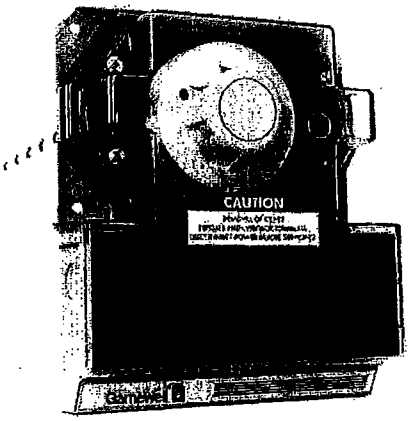
UL Listed, CSFM, MEA, FM Approved

Features

- Compatible with all 600 Series analog addressable FACPs
- Monitors up-to-25 normally open contact devices
- Monitors conventional smoke detectors
- LED for alarm annunciation
- Surface or flush mounting
- Field programmable
- Screw terminals for field wiring connections
- Style B, C, D and E wiring

Gamewell WORLDWIDE

XP95-PD, PDR
XP95-ID, IDR
Analog Addressable Duct Smoke Detectors



Description

Gamewell's Analog Addressable Duct Smoke Detectors provide early detection of smoke and products of combustion present in air moving through an HVAC duct. These devices are designed for prevention of smoke recirculation by the air handling systems. Fans, blowers and complete systems may be shut down or activated into fire mode operation in the event of smoke detection.

The Gamewell Analog Addressable Duct Smoke Detectors may utilize either interchangeable photoelectric or ionization sensor heads. The external alarm indication is by means of a light-emitting diode (LED) easily visible through the housing. A manual reset switch is provided on the front of the sensor.

Duct smoke Detectors are also available with auxiliary relay contacts. The relay requires two additional wires for power and will activate when the sensor reaches alarm levels. All wiring must comply with local codes and regulations.

XP95 Duct Smoke Detectors are capable of digitally transmitting not only its address but also the chamber's analog value to the FACP for analysis.

Air sampling is accomplished by two tubes which protrude into the duct. An exhaust tube of one standard length (7.5") is provided with the sensor housing. Intake sampling tubes, which must be ordered separately, are supplied in three standard lengths : 2.5, 5 or 10 feet.

Installation

Duct mounting is accomplished by the use of a template and 4 sheet metal screws, provided. The duct detectors are compatible with the analog loops on Gamewell's 600 Series of Analog Addressable Control Panels.

Programming

The only programming required at the XP95 Duct Smoke Sensors is for address setting. This is accomplished through the use of the Xpert Addressing Card which is inserted into the sensor base. When the sensor head is inserted into the base, the address is automatically relayed to the sensor. Changing the sensor does not require additional programming since the address remains on the Xpert card located in the base. All other sensor specific programming is accomplished at the FACP.

Approvals

UL Listed, CSFM, MEA, FM Approved

Features

- Compatible with Gamewell's 600 Series Analog Addressable Control Panels
- Interchangeable "Plug-in" Photoelectric or Ionization Heads
- Address is stored in the sensor base
- Address is set by *Xpert Addressing Card*
- Remote alarm LED option
- Two-wire supply - Polarity insensitive
- Very low standby current
- LED alarm indication on sensor head
- Rugged steel backbox with clear plastic cover
- Large terminal connection screws
- No additional screens or filters to clean or replace
- Relay version available with optional remote test unit
- Three standard tube lengths available 2.5, or 5 or 10 ft.

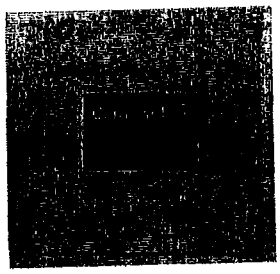
Gamewell WORLDWIDE

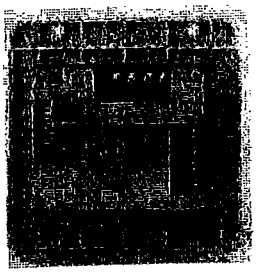
RCE-95
Relay Control Element

Description

Gamewell's Relay Control Element (RCE-95) provides the interface between Gamewell's 600 Series FACP analog circuits and building functions such as door holders, elevators, dampers, motors and disconnects. The RCE-95 offers feedback input points for positive confirmation of the controlled device's activity. The RCE-95 works with all 600 Series Analog Addressable FACPs. For annunciation and feedback at the panel, Gamewell offers a Relay Control Display (RCD). The RCD is only available with the IF632 and IF650 FACPs.

The RCE-95 is designed for either surface or flush mounting and is equipped with an integral LED which annunciates upon device activation.





Operation

The devices connect directly to the analog circuit of the Fire Alarm control panel via a two wire non polarized circuit. In its quiescent mode, the RCE-95 monitors its internal circuitry for status of the device itself and supervises an external control circuit for status.

When a status change is detected, the event can be programmed to display on the optional RCD module. When an event is reported to the control panel that requires the activation of the RCE-95, the control panel communicates via the analog circuit to the RCE-95 for activation. The integral LED is also lit for annunciation at the device.

Programming

Programming of the RCE-95 is accomplished through the setting of a single DIP switch easily accessible on the RCE-95's printed circuit board. The DIP switch is used to set the address of the device. All other programming is accomplished at the IdentiFlex control panel, either through the use of a laptop computer or through the Control Panel Operator's Display.

Engineer's Specifications

A programmable interface device shall be provided for the control and status reporting of programmed relay control functions. The shall communicate with the main control panel via an analog circuit (SLC) over a single pair of wires.

The device shall provide dry contacts and positive feedback of the controlled equipment's status annunciating upon activation. It shall be Gamewell model RCE-95.

Approvals

U L Listed, CSFM, MEA, FM Approved

Features

- Compatible with all 600 Series Analog Addressable FACPs
- Form "C" Dry Relay Contacts
- Event or manual Controllable Relay Functions
- Positive Feedback of Relay Activation
- LED Annunciates Activation
- Fully Supervised
- Surface or Flush Mounting
- Field Programmable
- Style 4,6 or 7 Wiring
- Screw Terminals for field wiring connections

Mounting

The RCE-95 is designed to mount in a standard $4^{11}/_{16}$" electrical backbox. The RCE-95 should be located in easily accessible and visible locations so that the built-in LED may be seen for quick indication of proper connection and activation.

Gamewell WORLDWIDE

PID-95, PID-95P Point Identification Device

Description

Gamewell's Addressable Point Identification Device (PID-95) provides the interface between the non-powered, normally open dry contact devices and Gamewell's IF610, IF632 and IF650 analog addressable fire alarm control panels. Point Identification Devices provide for monitoring of a single Style B circuit, and are designed for concealed mounting in an electrical backbox. The PID-95P can be surface or flush mounted and provides a visible LED for alarm/annunciation.

Operation

The Point Identification Device connects directly to the Signaling Line Circuit (SLC) via two wires. The PID-95 will monitor, via a two wire supervised SLC circuit, contact-type devices such as a waterflow switch or manual station. Upon activation of the monitored device, the PID-95 will report its address to the IdentiFlex 600 control panel via the analog SLC circuit. The control panel will then activate all programmed outputs related to the PID-95 in alarm.

Programming

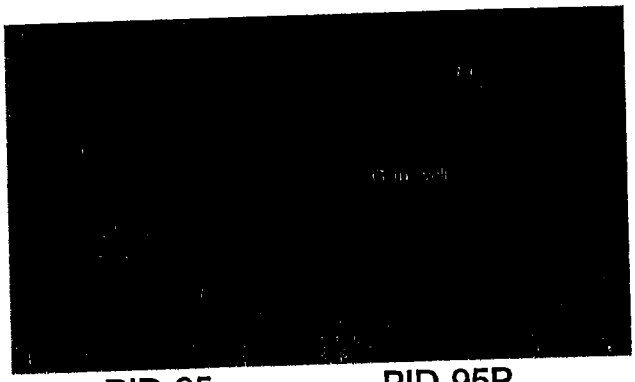
Programming of the PID-95 is accomplished through the setting of a single DIP switch easily accessible on the device's printed circuit board. The DIP switch is used to set the address of the device and the priority interrupt (DIP SW #8). All other programming is accomplished at the IdentiFlex control panel, either through the use of a laptop computer or through the Control Panel Operator's Display.

Standard Application

The PID-95 is intended to provide the interface between dry contact type devices and the SLC of the control panel. They provide a means of connecting and identifying monitor points without the use of conventional input modules at the main control panel. The use of PID-95's can dramatically reduce the field wiring required on many projects by reducing the number of wires required on the installation.

Engineer's Specifications

Addressable interface devices shall be provided for the monitoring and supervision of contact type devices connected to the Fire Alarm Control Panel. The devices shall monitor a normally open dry contact. The addressable interface devices shall communicate to the main control panel via the analog addressable circuit. The interface device shall be Gamewell model PID-95 or PID-95P.



PID-95 PID-95P

Approvals

UL Listed, CSFM, MEA, FM Approved

Features

- Monitors dry contact Devices
- LED for alarm annunciation
- Field Programmable
- Priority interrupt
- 4 11/16" plate mounted version is available for surface or flush mounting

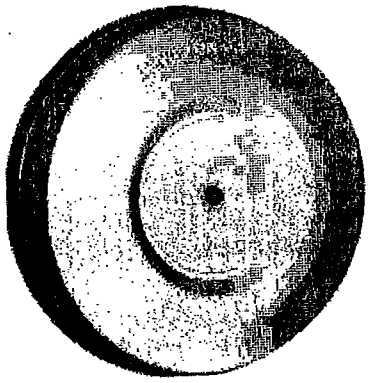
Gamewell WORLDWIDE

XP95-LI
Line Isolator

Description

Gamewell's Analog Addressable Systems can be wired as Style 7 (Class A) closed loop systems. These systems can be interrogated from either end so that all devices can remain in operation if an open circuit fault in the wiring occurs. A short-circuit fault can potentially disable the whole loop, but by simply interspersing the Gamewell XP95-LI Line Isolator module along the loop only the small section between isolators will be affected by the short circuit fault.

The XP95-LI Line Isolator mounts directly to a unique base for ease of installation. The unique base will not accept any other 600 Series XP95 products, eliminating any confusion in the field as to the particular type of device that belongs at the location.



Operation

The Gamewell XP95-LI Line Isolator uses a patented technique to recognize a wiring short circuit by monitoring a drop in voltage.

In Standby operation the Isolator provides a two-way power and data pathway with a low resistance of 0.4 ±0.1 ohms in either direction. If the incoming or outgoing supply voltage falls below 15V ±0.5V this is detected and the Isolation circuit operates to isolate in the direction of the short circuit. It also causes the yellow LED to flash at 3 second intervals. The Isolator continues to monitor voltage and when the short circuit is repaired the isolator automatically reverts to its low resistance condition.

The maximum number of Isolators is determined by the system layout with 50 Isolator Modules maximum on any signaling line circuit (SLC).

Unlike other 600 Series XP95 devices, Isolators are polarity sensitive and the positive DC supply must be connected to terminal "L2 IN/OUT" and the negative DC supply to terminal "L1 IN/OUT".

Standard Applications

The XP95-LI Line Isolator should be utilized any time the integrity of the line is essential. Typically used at areas within a line that branch off in a unique direction or to provide additional protection by isolating zone monitoring devices.

Approvals

UL Listed, MEA, CSFM, FM Approved

Features

- Compatible with Gamewell's 600 Series Analog Addressable Fire Alarm Panels
- Protects the integrity of the initiating loop should a short circuit fault occur
- Mounts in its own unique base
- Up-to-50 circuit isolators can be supported on a single SLC
- Low-profile styling
- Integral yellow LED on activation

Gamewell WORLDWIDE

FireForce 8 Expander Power Supply Notification Appliance Circuit

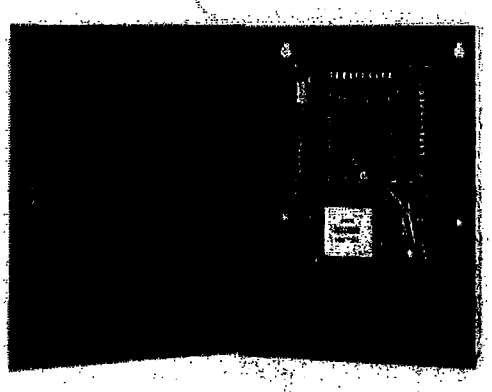
Description

The FireForce 8 (FF8) from Gamewell is a notification appliance circuit extender panel designed to extend the power capabilities of existing notification appliance circuits and to provide power for other ancillary devices. It also includes an internal battery charger.

The FF8 may be connected to any UL Listed Fire Alarm Control Panel to provide Notification Appliance Circuit expansion. The FF8 provides 1.5 Amps for auxiliary power to support system peripherals such as remote annunciators, door holders, etc.

Designed with advanced switchmode power supply technology, the FireForce 8 provides filtered and electronically regulated power distributed to four Notification Appliance Circuits (NAC). Each NAC is rated at 2.5 Amp maximum with a total output capacity of 8 Amp. The outputs may be configured as Four Class "B" (Style "B") or two Class "A" (Style "D") or two Class "B" and one Class "A" .

Gamewell's FF8 provides independent output circuit supervision. In the event of a NAC fault, the FF8 can be configured to notify the FACP. The FF8 has field selectable built-in strobe and horn sync protocols, to support Gamewell, Faraday, System Sensor, and Wheelock, or pass thru a pre-determined sync protocol from the host FACP eliminating the need for additional external sync modules. Independent horn silencing via sync protocol allows synchronized horns and stobes to operate on a single circuit. The FF8 supports field selectable temporal coding to facilitate existing notification appliance circuits. In retrofit applications that have EOL values different from the 3.9K ohm EOL resistor normally used with the FF8, a single resistor matching the existing EOL can be used as a reference EOL for all outputs. The reference resistor can be within a range of 2K ohm to 25K ohm, resistors outside this range will cause a trouble indication.



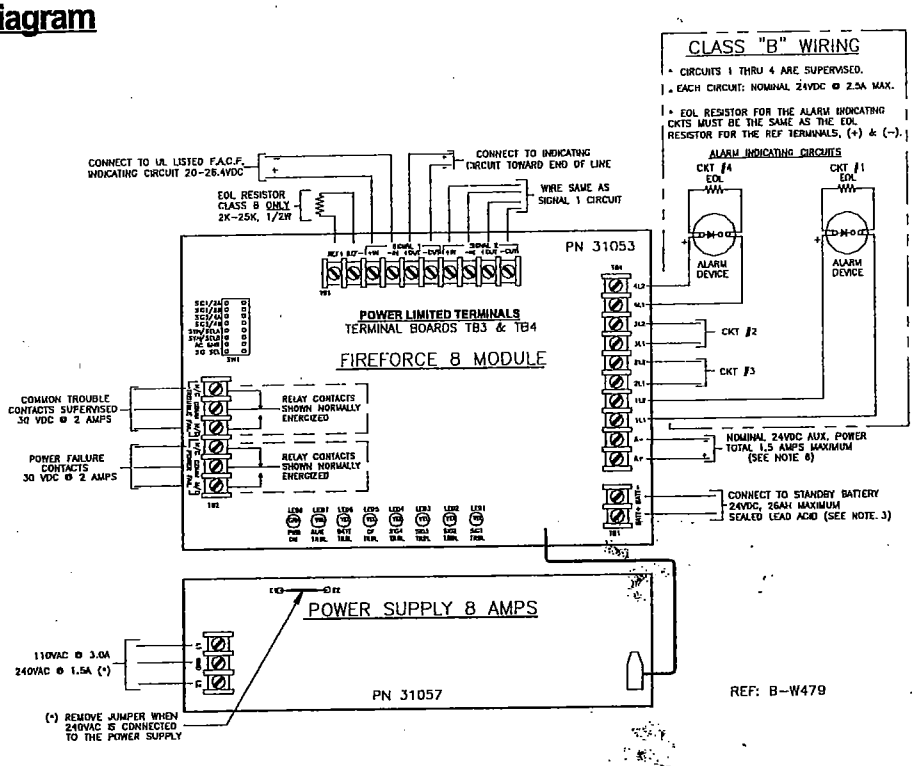
Approvals

UL Listed, CSFM Approved

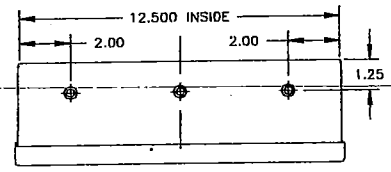
Features

- Provides two fully-supervised input/control circuits
- Field selectable strobe & horn sync protocols
- Multiple Sync Protocols compatible with the following appliances:
  Gamewell, Wheelock, Faraday, and System Sensor
- Four (4) configurable supervised NAC outputs
- 8 Amp 24 VDC, fully regulated full load output (Power limited)
- Output fault notification to FACP
- 1.5A auxiliary power output
- Eight (8) trouble and status LEDs
- Common trouble Form-C relay
- Isolated AC fail Form-C relay
- Ground fault detection
- 26 Amp battery charger capability
- Facilitates multi Notification Appliance Circuit synchronization for large areas

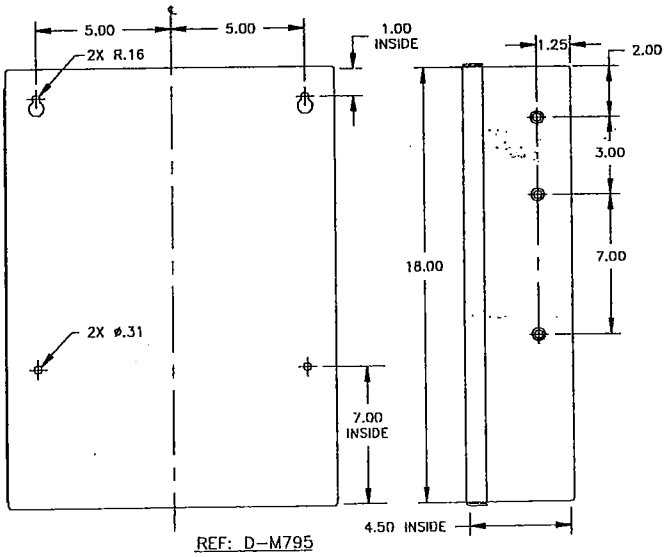
Wiring Diagram



MECHANICAL DATA



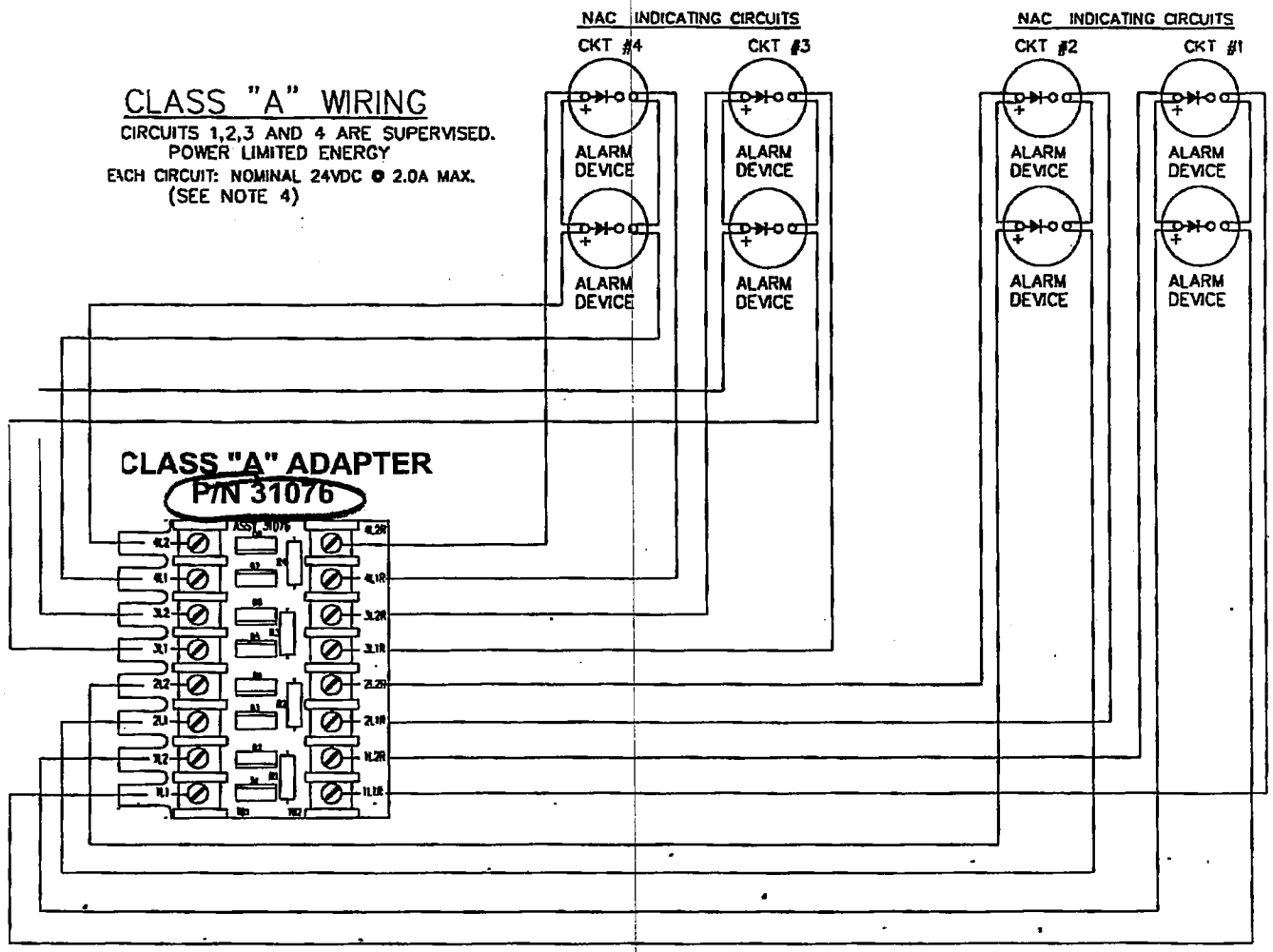
NOTE: COMBINATION KNOCKOUTS (1/2" & 3/4") ARE PER UL 50 STD. 9 PLACES: 3 TOP, 3 EA SIDE.



REF: D-M795

CLASS "A" WIRING

CIRCUITS 1,2,3 AND 4 ARE SUPERVISED.
POWER LIMITED ENERGY
EACH CIRCUIT: NOMINAL 24VDC @ 2.0A MAX.
(SEE NOTE 4)



NOTES:
1. ALL WIRING MUST BE IN ACCORDANCE WITH N.F.P.A. PAMPHLET #70, ARTICLE #760.
2. TO COMPLY WITH U.L. 864 PAR. 14.8 POWER LIMITED AND NON-POWER LIMITED WIRING, POWER LIMITED WRING MUST EMPLOY FPL,FPLR, OR FPLP WIRE
3. TOTAL CURRENT DRAW FOR THE 4 ALARM INDICATING CIRCUITS PLUS THE CURRENT DRAW FOR THE AUX. POWER CIRCUIT CANNOT EXCEED 8 AMPS.
4. CONNECT A 3.9K OHM RESISTOR ACROSS TERMINALS MARKED "REF+, REF-"

WIRING, CLASS "A" 4 CCTS
FIREFORCE 8

DRAWN BY: JAB	CHECKED BY:	SCALE:
APPROVED BY:	DISK	DATE: 8-31-01

TOLERANCE UNLESS OTHERWISE STATED
DECIMAL .XX ± .02 ANGULAR ±
.XXX ± .005 A 1° RADIUS

Gamewell WORLDWIDE

REV/DATE	
A 08-30-01	B-W479-4

Gamewell WORLDWIDE

NS/NS4 NON-SYNCHRONIZED/ SYNCHRONIZED HORN STROBES

Description

Series NS/NS4 Horn Strobe appliances are a LOW CURRENT design with ZERO INRUSH. The horn appliances provide a selectable continuous horn tone or temporal pattern (Code 3) tone when constant voltage from a Fire Alarm Control Panel (FACP) is applied. Each tone has two dB settings to choose from. All models (horn only or horn with strobe) may be synchronized when used in conjunction with the SM or DSM Sync Module(s) or FF8 Power Supply with Patented Sync Protocol. Additionally, the horn may be silenced while maintaining strobe activation of the NS/NS4 Horn Strobe appliances. All of these features are achievable with either Patented 2 Wire Series NS or with the 4 wire NS4 (Audible will operate only with power applied to both strobe and audible).

The NS/NS4 Horn Strobe appliances are designed for maximum performance, reliability, and cost-effectiveness while meeting or exceeding the latest requirements of NFPA 72 (National Fire Alarm Code), ANSI 117.1 (American National Standard for Accessible and Usable Buildings and Facilities) and UL Standard 1971 (Standard for Signaling Devices for The Hearing Impaired) and UL 464 (Audible Signal Appliances). NS/NS4 Audible Strobe appliances, when properly specified and installed in accordance with NFPA/ANSI standards can provide the Equivalent Facilitation allowed under ADA Accessibility Guidelines (ADAAG General Section 2.2) by meeting or exceeding the illumination which results from the ADA specified strobe intensity of 75 candela at 50 feet. This is an illumination of .030 lumens per square foot. When used with the SM or DSM Sync Modules or FF8 Power Supply with Patented Sync Protocol, the continuous horn tone produces a synchronized temporal (Code 3) tone (required by NFPA-72 (1999).

Strobe Average Current

CD Setting on Model	Fixed Candela	Multi Candela
15	.050	0.47
15/75	.065	N/A
30	.081	.081
75	.133	.128
110	.161	.166

Approvals

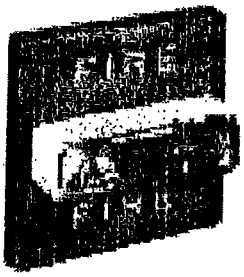
UL 1971 and UL 464 Listed
FCC Part 15
California State Fire Marshal (CSFM),
New York City (MEA)
Factory Mutual (FM) and
Chicago (BFP) Approved
ADA/NFPA/ANSI compliant

Features

- Field selectable Candela settings: 15, 30, 75, or 110 cd and non selectable models available in 15, 15/75, 30, 75, and 110cd
- Selectable continous horn tone or temporal pattern with selectable dBA settings of 90 or 95 dBA
- Universal Mounting Plate
- Wall mount only
- 2 wire or true 4 wire 24 VDC models with 4 wire version meeting NFPA 72 (1999) 1-5.8.4
- Matching horn available
- Meets OSHA 29 Part 1910.165.

Gamewell WORLDWIDE

SERIES RSS NON-SYNCHRONIZED/ SYNCHRONIZED STROBES



Description

Series RSS Multi-candela Strobe Appliances offer a field selectable choice of four candela settings including: 15, 30, 75, or 110 candela.

Pre-set candela versions are available in 15, 30, 75, and 100 candela for ceiling mounting.

These versatile Strobe Appliances will satisfy virtually all requirements for indoor, wall and ceiling mount applications.

All models may be synchronized when used in conjunction with the SM or DSM Sync modules or the FF8 power supply. Synchronized strobes can eliminate possible restrictions on the number of strobes in the field of view. These synchronized strobes offer an easy way to comply with ADA requirements concerning photosensitive epilepsy.

The Series RSS Multi-candela strobes employ a Patented Integral Strobe Mounting Plate that can be mounted to a single gang, double gang, 4" square, 100mm European backbox or the 49558 surface backbox. If the flush backbox has side or top space between it and the finished wall, the NATP (Notification Applicance Trimplate) may be used. It provides an additional .65" of trim for the Appliance. An attractive cover plate is provided for a clean, finished appearance on all models.

Approvals

UL 1971 Listed, CSFM, NYC (MEA)

Approved ADA/NFPA/ANSI compliant

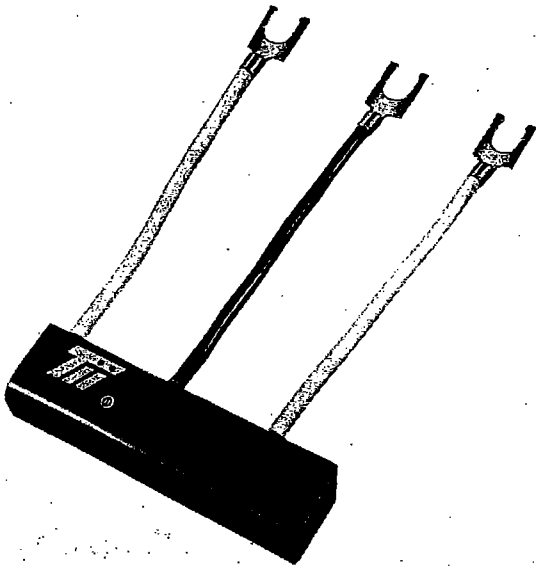
Meets OSHA 29, Part 1910.165

Features

- Low Current
- Zero Inrush
- Universal Strobe Mounting Plate
- 24 VDC filtered or unfiltered VRDMS
- In/Out Screw Terminals for #18 - #12 AWG
- Both Non-sync and Synchronized in one appliance
- Wall and Ceiling Mount Single Candela Models Available
- Retrofit Plates Available
- Weatherproof Model

TII 317 MAXIMUM DUTY

THREE-ELECTRODE GAS TUBE SURGE ARRESTER



DESCRIPTION

The TII 317 is an encapsulated module containing a TII Maximum Duty three-electrode gas tube surge arrester, engineered to protect equipment from lightning and induced surges. It is applicable for use in control circuits or other specialized communications services using open wire, above ground cable, or buried cable. It is also recommended for use on AC circuits in conjunction with line fuses, circuit breakers or circuit limiting resistors. The TII 317 provides superior protection due to the rapid recovery of the three-electrode gas tube, which returns the protected line to service as the transient subsides.

Installation is straightforward for both existing and new applications. The unit's three spade tip leads facilitte connection to binding post terminals with up to No. 10 screws. The two outer leads are connected across the two-wire circuit being protected, and the center lead to ground. The grounding termination point should provide a low resistance path to earth ground in order to optimize protection.

FEATURES

- ☐ **Provides Maximum Duty three-electrode gas tube protection**
- ☐ **Self-restoring**
- ☐ **Prevents dangerous metallic voltages**
- ☐ **Reduces costly maintenance**
- ☐ **Recommended for use on control circuits buried cable and other specialized communication links**

Wheelock Inc.

Helping People Take Action℠

AC-MAX
AC-MAXS
DC-MAX
DC-MAXS

INDUSTRIAL SYSTEMS PRODUCTS

SERIES MAX STROBES

SERIES MAX STROBE High Intensity, weather-resistant visible warning signal, designed for stationary or mobile applications. Available in AC or DC voltage and with steady light option.

Description:

The AC-MAX and AC-MAXS models are for 120 VAC applications.

The DC-MAX and DC-MAXS models are for DC applications, with a DC voltage range of 10.5 VDC to 31.0 VDC.

MAXS versions offer two steady lights in addition to the strobe light.

Features for all Models:

- UL 1638 listed for indoor or outdoor use
- Powerful 7.5 Joules double flash light burst for MAX strobe bulb
- 60 double flashes per minute
- Available lens colors per SAE specifications: Amber, Blue, Clear, Red
- Durable, high impact Lexan construction
- Mounting options: 1/2 inch pipe, surface mount, flange mount, standard 4-inch square electrical box or Wheelock WBB Weather Resistant Backbox (order code 2959)
- Overall height: 5 inches
- Diameter: 6.2 inches
- Weight: 2 lbs.
- Made in USA
- 3 year warranty

Features for Steady Light Models:

- Two 7 watt incandescent lamps
- Independent wiring for electrical hook-up

Applications for Series MAX Strobes:

- Hazard warning / alerting
- Industrial visual signaling
- Strobe beacons for vehicles or equipment
- Process control area notification
- Access gate / loading dock identification

Applications for Strobe & Steady Light Models:

- Location of specific equipment
- Eye wash station / emergency medical kit location
- Emergency phone location
- Warning lights
- Security alert indication

MAX STROBE

NOTE: The Series MAX Strobes are not designed to operate on a synchronized NAC Circuit.

Power Patrol™ Batteries

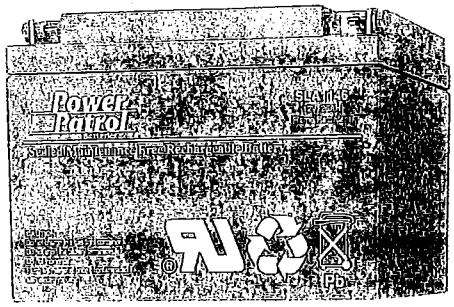
Maintenance-Free Rechargeable Sealed Lead Acid Batteries

6 Volt 1.3 AH to 12 Volt 44 AH

MH25280

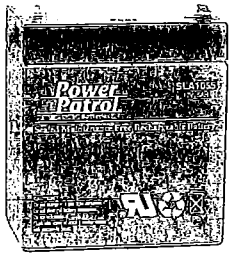
Features

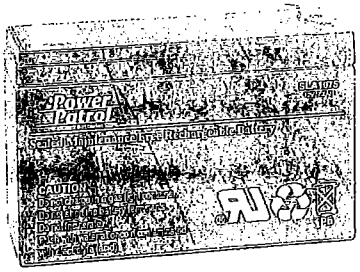
- Maintenance Free
- Leak Proof / Spill Proof
- Gas Recombination
- Absorbed Electrolyte
- Float / Cycle Use
- Low Self Discharge Rate
- Safety Valve
- Lead Calcium Alloy
- Useable In Any Position
- Rugged Design

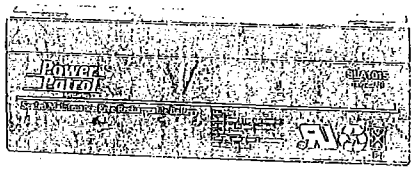


Application

- UPS System DC & AC
- Telecommunication PABX etc.
- Emergency Lighting
- Fuse & Security Alarm System
- Portable VTR / TV
- Power Tool
- Computer
- Toys - Cars
- Fan
- Electronic Torch
- Window Washer



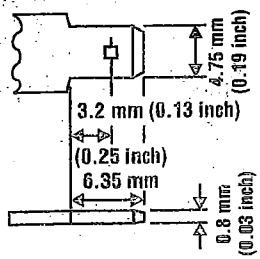




Quantity per Box	Dimensions						
	Length mm [inch] L	Width mm [inch] W	Height Case mm [inch] H	Overall Height Over Terminals mm [inch] h	Weight kg [lb]	Terminal Position	Terminal Type
40	96.5 [3.79]	23.8 [0.93]	51 [2]	58 [2.28]	0.3 [0.66]	B	ST1
20	70 [2.75]	46 [1.81]	101 [3.97]	107.8 [4.24]	0.82 [1.81]	A	ST1
10	151 [5.94]	50 [1.96]	94 [3.70]	101 [3.97]	1.73 [3.81]	B	ST1,2
10	151 [5.94]	50 [1.96]	94 [3.70]	101 [3.97]	2 [4.4]	B	ST1,2
20	96.5 [3.79]	45 [1.77]	52 [2.04]	59 [2.32]	0.59 [1.3]	E	ST1
20	177.5 [6.98]	34 [1.33]	60 [2.36]	63 [2.48]	0.83 [1.83]	B	ST1
10	133.5 [5.25]	67 [2.63]	61 [2.40]	64 [2.51]	1.29 [2.84]	D	ST1
10	89.5 [3.52]	69.5 [2.73]	101 [3.97]	107.5 [4.23]	1.8 [3.97]	B	ST1,2
8	150 [5.90]	64.5 [2.53]	95 [3.74]	101.6 [4]	2.57 [5.67]	D	ST1,2
4	151 [5.94]	97.5 [3.83]	94 [3.70]	102.3 [4.02]	4.03 [8.88]	D	ST1,2
2	180 [7.08]	76 [2.99]	167 [6.57]	167 [6.57]	5.96 [13.14]	C	ST3 *
1	174.5 [6.87]	165 [6.49]	125 [4.92]	125 [4.92]	8.52 [18.78]	C	ST3 *
1	196 [7.71]	164 [6.45]	170.5 [671]	170.5 [6.71]	14 [30.86]	C	ST4
6	150 [5.90]	64.5 [2.5]	95 [3.74]	101.6 [4]		D	ST1,2

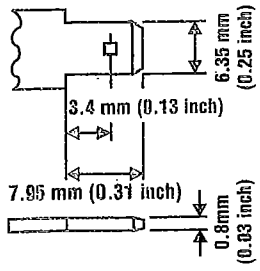
TERMINAL TYPE

ST1



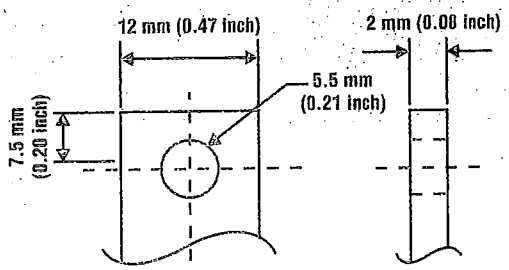
(FASTON TAB No. 187)

ST2



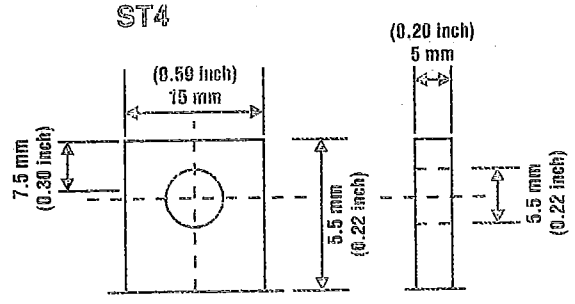
(FASTON TAB No. 250)

ST3



(M4 bolt & nut)

ST4

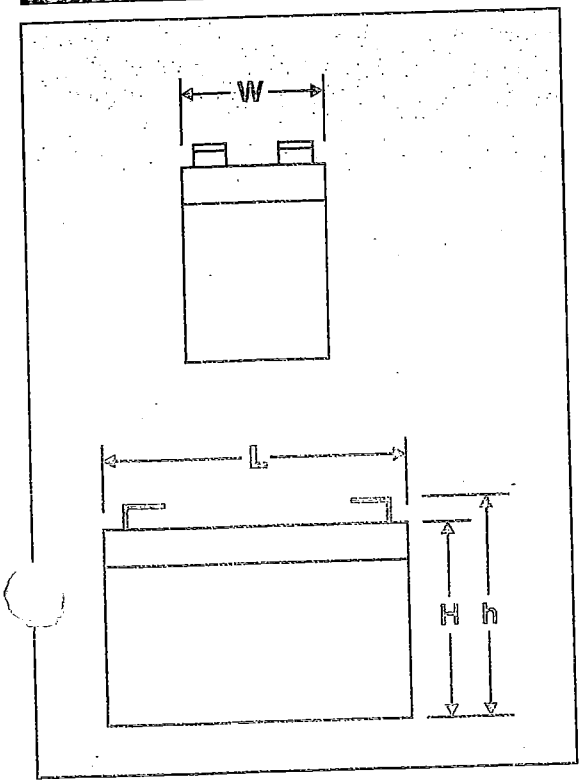


(M5 bolt & nut)

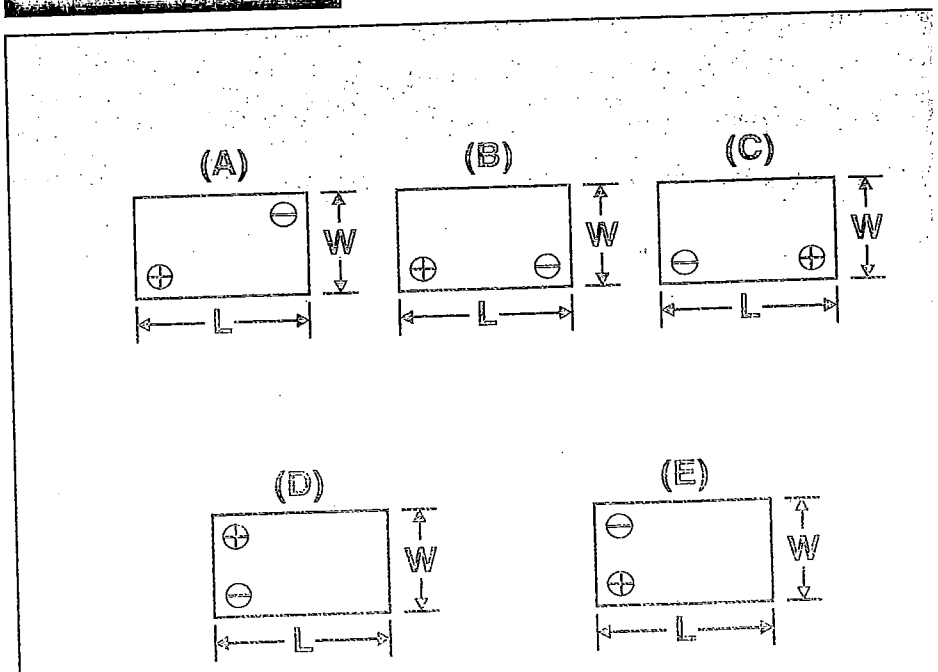
SPECIFICATIONS - POWER PATROL

Battery Model No.	Nominal Voltage (V)	Ah Capacity					Approx Internal Resistance m Ω	Maximum		FR Seri UL94 Conta
		Normal 20 Hour 1.75vpc	Normal 10 Hour 1.75vpc	Normal 5 Hour 1.70vpc	Normal 3 Hour 1.70vpc	Normal 1 Hour 1.55vpc		Charging Amps	Discharge Amps (5sec)	
SLA 0865	6	1.3	1.2	1.1	1.05	0.9	70	0.65	36	
SLA 0905	6	4.5	3.85	3.4	3.15	2.625	20	2.25	75	*
SLA 0955	6	10	9.4	8.5	8.1	6.8	10	5	120	*
SLA 0959	6	12	10.75	9.75	9.3	8	10	6	180	*
SLA 1005	12	1.3	1.2	1.1	1.05	0.9	130	0.65	36	
SLA 1015	12	2.2	2	1.8	1.65	1.45	90	1.2	60	
SLA 1035	12	3.3	3.05	2.75	2.55	2.2	60	1.65	60	
SLA 1055	12	5	4.4	3.9	3.6	3	40	2.5	75	
SLA 1075	12	7.2	6.5	5.75	5.25	4.5	25	3.6	105	
SLA 1105	12	12	10.75	9.75	9.3	8	20	6	180	
SLA 1116	12	18	16.7	15.25	13.8	11	14	9	250	
SLA 1146	12	26	24	22.75	20.7	17.5	12	13	288	
SLA 1161	12	44	40.5	35.5	33	26	6	22	360	
HIGH RATE DISCHARGE RANGE (H) FOR U.P.S. APPICATION										
SLA 1075	12	37.2	*Under development, available end 1997							

CASE DIMENSIONS



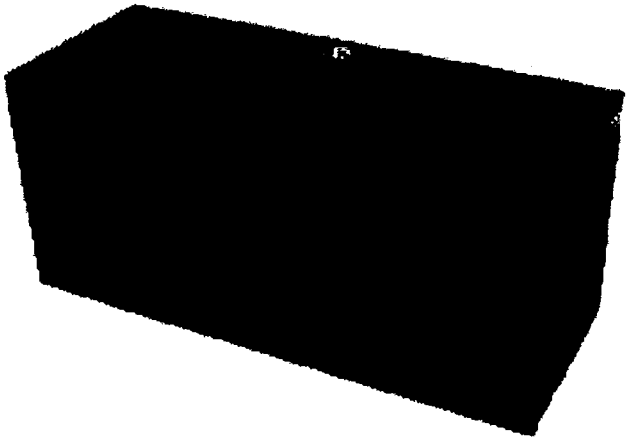
TERMINAL POSITION



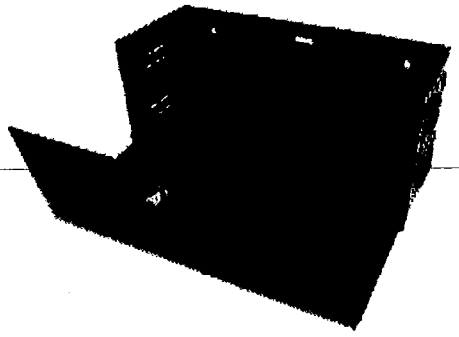
NO EXCUSES!

BCA

Battery Cabinet Accessory



The BCA Battery Cabinet Accessory is designed for the professional installation of systems requiring battery storage and meets the requirement of NFPA 72 (1-5.2.9) standby battery storage for battery backup. The BCA allows for easy access and maintenance of the batteries while also assisting against unnecessary power drain, interference or degeneration of the battery. The unit can be mounted securely to a wall, preventing mechanical injury or damage to other equipment.



Constructed from heavy duty 16 gauge steel with a full length piano hinged door to allow optimum access to your equipment within the cabinet. Other features include a high security CAT 30 keyed door lock and vented sides. Complete interior and exterior finish is accomplished by a phosphate treatment followed by a durable baked-on textured polyester coating.

RED SAE P/N: SSU00500
BLACK SAE P/N: SSU00501

Standard Features:

- 16 Gauge (.062 thk.) cold rolled steel
- Stainless steel piano hinge
- Red or black textured finish
- CAT 30 keyed door lock
- Dimensions:
  22" wide x 10" high x 8 1/2" deep
- Four 1/2" and 3/4" EMT conduit knockouts located on both sides and back
- Wall mounting holes

ADA

NFPA

ISO9001
REGISTERED

Made In U.S.A.

Integration Accessories

Space Age Electronics, Inc.
406 Lincoln Street
Marlboro, MA 01752-2195
www.1sae.com
800.486.1723—voice
508.485.0966
508.485.4740—fax

No Excuses Just Solutions!

PIER MARKET - NARRAGANSETT, RI
Standby Battery Calculations

Quiescent Condition

Item	Qty.	@ (Amp)	Current (Amp)
COMMON CONTROL BOARD	1	0.1250	0.1250
XP-95 HEAT DETECTOR	2	0.0004	0.0008
PID-95 MODULES	4	0.0005	0.0020
XP-95 SMOKE DETECTORS	3	0.0004	0.0012
MS-95 PULL STATIONS	13	0.0005	0.0065
XP95LI ISO MODULES	5	0.00005	0.0003
CZI MODULE	3	0.0100	0.0300
RCE-95 CONTROL MODULE	3	0.0005	0.0015
	Total Quiescent Load:		0.1673 Amp

Quiescent Amp Hours Required = Total Load x Time Required
= 0.1673 Amp x 60 hours
= 10.0350 Amp Hours

Alarm Condition

Item	Qty.	@ (Amp)	Current (Amp)
COMMON CONTROL BOARD	1	0.1710	0.1710
HORN STROBES	31	0.1500	4.6500
BEACON	2	0.4700	0.9400
MODULES	28	0.0005	0.0140
DETECTORS	5	0.0004	0.0020
STROBES	5	0.1000	0.5000
	Total Alarm Load:		6.2770 Amp

Alarm Amp Hours Required = Total Load x Time Required
= 6.277 Amp x 0.166 hours (10 minutes)
= 1.0420 Amp Hours

Total Amp Hours Required = Total (Quiescent + Alarm) Amp Hours
= 10.0350 + 1.0420
= 11.0770 Amp Hours

Total Amp Hours Supplied = **26AH (FACP)**
7AH (BOOSTER)
TOTAL= 33AH

SINCE 1966

R.B. Allen Co., Inc.

NE 1-800-258-7264
FAX (603) 964-8885

P.O. Box 770
131 Lafayette Rd.
No. Hampton, NH 03862
(603) 964-8140

Service and Warranty

R.B. Allen Co., Inc. is a UL Certified ISO 9001 registered Fire Alarm Distributor since 1966 with offices located in North Hampton, NH and Woonsocket, RI. The service policies of R.B. Allen Company are no charge to the customer for warranty work including parts and labor for one (1) year from the time of final acceptance.

R.B. Allen Company warranty applies only to the equipment it provides and does not cover defective wiring or equipment provided by the Electrical Contractor.

Service calls resulting from acts of nature, acts of vandalism, or acts which are beyond the control of the equipment manufacturer are excluded under the guarantee and shall be considered a billable call.

R.B.Allen Company factory trained and certified technician will provide job site supervision during installation of the system and perform final connections, testing, and adjusting of the Fire Alarm System. They also will instruct the owner's personnel on the operation and maintenance of the fire alarm system.