

SIEMENS*Ingenuity for life*

Cerberus[®] PRO Modular system

Zone-Indicating Card Model ZIC-4A

Architect & Engineer Specifications

- ❑ Operates audible or visual notification appliances
- ❑ One (1) or (2) two-channel voice operation
- ❑ Operates audio speakers (25V or 70VRMS)
- ❑ Three (3) unique signals from each circuit
- ❑ Available bell-follower application
- ❑ Four (4) `Class A' or `Class B' circuits
- ❑ 24 VDC at 3.0 Amps per circuit
- ❑ Built-in strobe synchronization
- ❑ City-tie or leased-line output
- ❑ Coded audibles available
- ❑ Fully programmable
- ❑ On-board microprocessor
- ❑ Automatic / manual control
- ❑ March time / Uniform Code 3
- ❑ Selectable degrade operation
- ❑ Built-in, ground-fault detection
- ❑ Silenceable / non-silenceable option
- ❑ Circuits power limited, per NEC 760
- ❑ NFPA 13, pre-action and deluge
- ❑ NFPA 2001, FM-200 Releasing
- ❑ Releasing service
 - FM Approved for single and double interlock, pre-action system Operation
- ❑ UL 864 9th Edition Listed & ULC Listed;

Product Overview

The Zone-Indicating Card (Model ZIC-4A) provides four (4) fully supervised and programmable output circuits for use on Cerberus PRO Modular fire alarm control panels (FACPs).

Model ZIC-4A supplies four (4) `Class B' or `Class A'-type output circuits – power limited to 3.0 Amps maximum per circuit. Each circuit can be independently programmed for use with listed audible or visual notification appliances, listed emergency-audio speakers, municipal tie boxes, leased lines, or as releasing circuits.

Model ZIC-4A can send audio to additional speaker zones, via the Model EBA2004-A1 booster amplifier.

Model ZIC-4A plugs into one (1) slot in the Model CC-5 or Model CC-2 Card Cage, and has on-board LEDs for system status and troubleshooting. Indication of power, communication, internal operation, and ground-fault conditions are provided, as well as indication of circuit activation or Trouble conditions.

All system-status conditions are also reported to each Cerberus PRO Modular system's Operator Interface (OI). Each circuit or output may be controlled automatically with system-logic programming, via the custom-configurable programming tool, *Zeus-C*, or manually, using the Cerberus PRO Modular panel keypad on the OI.

Automatic control may also be time based. Each circuit or output can be manually `Armed' or `Disarmed' via the OI keypad.

When any circuit or output has been `Disarmed', the OI display will indicate the affected circuit or output, and the `Partial `System Disable' LED will illuminate – until the circuit or output has been returned to the `Armed' condition. Model ZIC-4A circuits can also be manually energized or de-energized when in the `Disarmed' state, via the OI.



Model ZIC-4A contains a microprocessor, which allows notification-circuit outputs to function in a degrade mode – even if the main Cerberus PRO Modular panel processor or the local-network communication link has failed. In a degrade mode, Model ZIC-4A will respond to an `Alarm' or `Trouble' from any intelligent-addressable initiating device or conventional-zone initiating device connected in the same local enclosure.



Product Overview – (continued)

Standard NAC Zone – Each of the four (4) circuits on Model ZIC-4A can be configured for use as a standard notification appliance circuit (NAC). The NAC output can be used as a steady, strobe-synchronized, or zone-coded output. Available coding includes ANSI Temporal, March Time 120-pulse-per-minute (PPM), March Time 60 PPM, March Time 30 PPM, Canadian Two-stage 30 PPM, Canadian Two-stage 120 PPM and custom coding.

Outputs may be programmed through logic to transmit up to three (3) different signal types, depending on event priority. For instance, the same circuit can be programmed to transmit the ANSI Temporal pattern for evacuation, March Time 120 PPM for tornado notification, and a custom code for recall.

Standard Speaker Zone –

Each of the four (4) circuits on Model ZIC-4A can be configured for use as a standard speaker circuit in single or dual-channel systems. Model ZIC-4A can be used with the Model ZAM-180 bulk amplifier, or Model ZAC-40 amplifier card. Each circuit on Model ZIC-4A is limited to 96 Watts per zone.

Releasing Zone –

Each of the four (4) circuits on Model ZIC-4A can be configured for use as a releasing circuit. This circuit can be used to release Sinorix® 227 or 1230 agents. For proper supervision of a releasing circuit, the Model REL-EOL module must be used. Model REL-EOL can use power directly from the Cerberus PRO Modular system. No external, regulated power supply is required.

Municipal Tie –

Each of the four (4) circuits on Model ZIC-4A can be configured so that it can be connected to and activate a municipal city tie box. The circuit meets the requirement of some jurisdictions to allow the box to be reset before the FACP. A leased-line module (Model LLM-1) is required for this feature.

Leased Line –

Each of the four (4) circuits on Model ZIC-4A can be configured for connection to a leased line. The circuits can be programmed to transmit `Alarm`, `Supervisory`, or `Trouble` signals. A leased-line module (Model LLM-1) is required for this feature.

Bell Follower –

Each of the four (4) circuits on Model ZIC-4A can be configured as a NAC that can follow the input from another NAC in an external FACP. Circuit 1 on a Model ZIC-4A card within a Cerberus PRO Modular panel system enclosure can be configured as the Bell Follower – Primary and is connected to the external NAC.

Any other ZIC-4A circuit in that enclosure can be configured to follow the state of the Primary Bell Follower. This feature can be used to synchronize coded or ANSI Temporal patterns for audible sounds with another FACP.

| Controls and Indicators | | Electrical Ratings | |
|--------------------------|---|---|----------------------|
| RESET switch: | Re-initializes Model ZIC-4A card only | 24V Back Plane or External Power Current Draw: | See: Note below |
| POWER LED: | Indicates the power is applied to Model ZIC-4A | 24V Current Draw: [Screw Terminal] | Total Device Current |
| CARD-FAIL LED: | Alights when the card microprocessor has failed | 6.2V Current Draw: [Back Plane] | 0 |
| CAN-FAIL LED: | Illuminates when the CAN communication fails and Model ZIC-4A is in degrade mode | 24V Current Draw: [Standby] | 89mA |
| HNET-FAIL LED: | Illuminates when the HNET communication fails and Model ZIC-4A is in degrade mode | | |
| GND.FAULT LED: | Indicates the detection of a ground - fault condition (either negative or positive) on the field wiring of Model ZIC-4A | | |
| ZONE ACTIVE LEDs: | Illuminates to indicate the zone has been activated either automatically or manually. There is one (1) LED for each zone | | |
| TROUBLE LEDs: | Indicates the presence of a `Trouble` condition (either an open circuit or a short circuit) on the zone. There is one (1) LED for each zone | | |

NOTE:
The 24V current is dependent on the wiring type and usage of each ZICckt setting for Model ZIC-4A.

The table found in the left-hand column of the next page contains the required current draws for the wiring type and usage of each zone:

| Controls and Indicators | | |
|--|----------------------------|-------------------------------|
| ZIC-4A Current Requirement [ZIC-4A standby current: 89mA] | | |
| Zone Usage | Output Current Requirement | 'Class A' Current Requirement |
| Not Used | 0 | 0 |
| NAC | 17mA | 6mA |
| Strobe – Sync. | 17mA | 6mA |
| Strobe – Unsync. | 17mA | 6mA |
| Municipal Tie – USA | 34mA | 0 |
| Municipal Tie – Canada | 17mA | 0 |
| Releasing Zone | 17mA | 0 |
| Leased Line – Alarm | 17mA | 0 |
| Leased Line – Trouble | 17mA | 0 |
| Leased Line – Supervisory | 17mA | 0 |
| Bell Follower – Primary | 0 | 0 |
| Bell Follower – Secondary | 17mA | 6mA |
| Speaker Zone | 34mA | 6mA |
| NAC – Coded | 17mA | 6mA |

| Details for Ordering | | |
|----------------------|-------------|------------------------------|
| MODEL OR TYPE | PART NUMBER | PRODUCT |
| ZIC-4A | 500-033050 | Zone Indicating Card |
| REL-EOL | 500-696359 | End-of-Line Releasing Module |

Temperature and Humidity Range

Model ZIC-4A is UL | ULC Listed for indoor dry locations within a temperature range of 120+/-3°F (49+/-2°C) to 32+/-3°F (0+/-2°C) and a relative humidity of 93+/-2% at a temperature of 90+/-3°F (32+/-2°C).

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NOTICE – The information contained in this data-sheet document is intended only as a summary, and is subject to change without notice. The product(s) described here has/have a specific instruction sheet(s) that cover various technical, limitation and liability information. Copies of install-type, instruction sheets – as well as the *General Product Warning and Limitations* document, which also contains important data, are provided with the product, and are available from the Manufacturer. Data contained in the aforesaid type of documentation should be consulted with a fire-safety professional before specifying or using the product.

Any further questions or assistance concerning particular problems that might arise, relative to the proper functioning of the equipment, please contact the Manufacturer.

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