Simplex

Life Alarm™ Fire Alarm Controls

UL, ULC Listed*
FM Approved**
NYC, MEA Approved†

Fire Alarm Controls
4009 Series NAC Power Extender for Conventional NAC Operation

FEATURES

- **Extends capacity of an existing notification appliance circuit (NAC):**
  - Provides four, power-limited NACs with general alarm operation, available as Class B or Class A, each rated 2 A (expandable to eight NACs)
  - Includes 8 A power supply/charger
  - Follows coded or non-coded alarm input
- **Internal 8 A power supply/battery charger:**
  - Charges internal batteries up to 12.7 Ah or up to 18 Ah batteries in external cabinet
  - Supervises for power loss, brownout, and batteries, and has power-on and trouble LEDs
  - Selectable for use with remote battery/charger
- **Flexible connections to host panel also provide earth fault detection:**
  - Local installations connect to dedicated NAC (+) and panel power supply return (0 V)
  - For remote locations, up to four, 4009s can be connected on a single NAC with notification appliances, with up to eight signal cards allowed (requires 4009-9806 Earth Detection Module)
- **Individual circuit trouble LEDs**
- **Surface/semi-flush beige cabinet included**
- **UL listed to Standard 864**

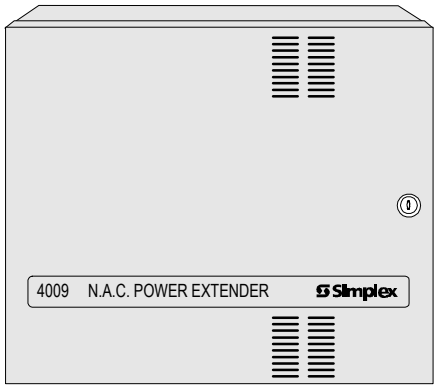
SPECIFICATIONS

Input	
120 VAC Models	3A @ 102-132 VAC, 60 Hz
240 VAC Models	1.5A @ 204-264 VAC, 50/60 Hz
Alarm/Supervisory Input	18 to 32 VDC, filtered or unfiltered
Environmental	
Operating Temperature	32° F to 120° F (0° C to 49° C)
Operating Humidity Range	10% to 90% RH, from 32° F to 104° F (0° C to 40° C)
Battery Requirements/NAC Loading	
Module Supervisory Current	• 67 mA for standard system • 37 mA for additional 4 circuit card
Module Alarm Current	• 30 mA for power supply • 73 mA per 4 circuit card
Earth Detect Module	• 4 mA, alarm and supervisory
NAC Loading, 8 A maximum	• 2 A maximum per NAC • 4 A maximum per 4 circuit card when second card is installed

* ULC listed models are designated with a "C" suffix (example: 4009-9001C).

** FM approved with 120 VAC input.

† Accepted for use – City of New York Department of Buildings – MEA35-93E.



4009 NAC Power Extender

DESCRIPTION

Compliance with ADA (the Americans with Disabilities Act) often requires adding notification appliances to existing fire alarm control panels. If the existing panel cannot handle the additional devices, a Simplex 4009 NAC Power Extender can provide an additional 8 A of NAC power with four, supervised reverse polarity NACs, Class B or Class A (Style Y/Z), without requiring a control panel replacement.

Flexible Locations. The 4009 can be mounted close to a compatible, dedicated host panel NAC, or can be located remotely. When remotely located, up to four, 4009s can be connected to a compatible NAC circuit that can also include notification appliances. Remote locations require the optional 4009-9806 Earth Detect Module. (Refer to connection diagram on next page for additional information.)

Operation. Alarms from the host panel will signal the four, 4009 NACs to extend the alarm. The 4009 monitors itself and each of its output NACs for trouble conditions (and optionally, earth detection trouble) and opens the host NAC's connection to inform the host panel, but still being able to respond to alarms.

Earth Fault Detection is maintained by the host fire alarm control panel when the 4009 is mounted locally to a dedicated NAC. If the 4009 is remotely located on a compatible reverse polarity NAC, the optional earth detect module will provide the required earth detection. If an earth fault is sensed, the module will transfer a trouble to the controlling NAC and the 4009 will light its own earth fault trouble LED.

4009 NAC Expansion. An additional four circuit module may be added to allow separate control of audible and visible appliances or to allow all eight circuits to be controlled together.

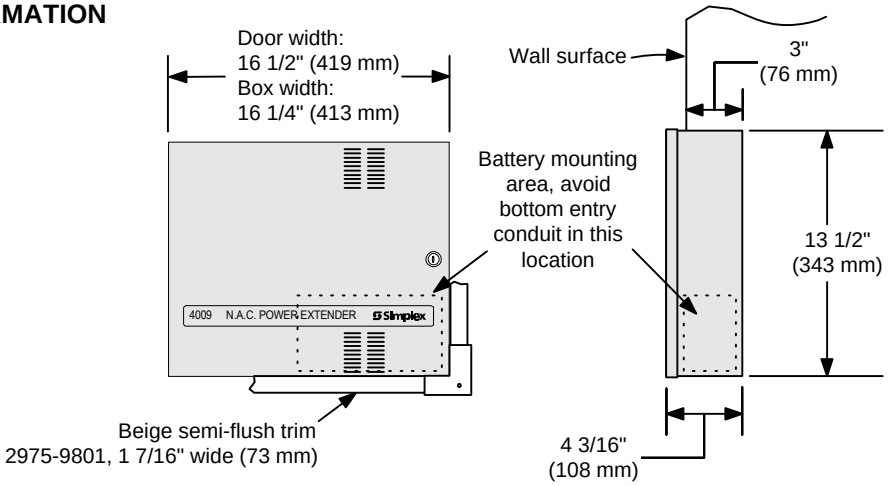
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4009 MODEL SELECTION CHART

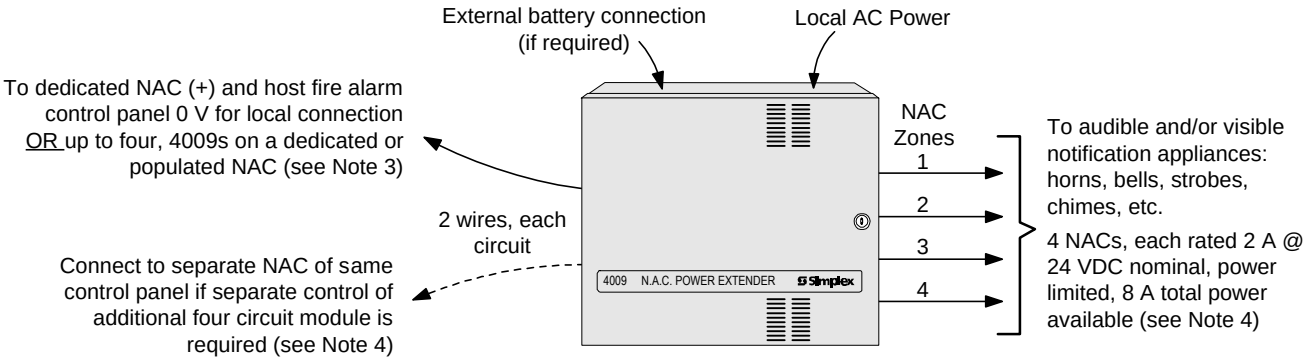
Model	Description	
4009-9001	Four Circuit NAC Extender Panel, 120 VAC Input power	Class B/Style Y
4009-9002		Class A/Style Z
4009-9101	Four Circuit NAC Extender Panel, 240 VAC Input power	Class B/Style Y
4009-9102		Class A/Style Z
4009-9803	Additional Four Circuit NAC Module, field installed (one maximum)	Class B/Style Y
4009-9804		Class A/Style Z
4009-9805	Red Appliqué for NAC Extender cabinet	
4009-9806	Earth Detect Module, field installed	
2975-9801	Semi-Flush Trim Kit, beige	
2081-9288	Batteries, 12 V, sealed lead-acid, 2 required*	12.7 Ah, maximum size for internal cabinet mounting
2081-9275		18 Ah, requires external battery cabinet 4009-9801
4009-9801	External Battery Cabinet, beige with solid door, includes battery harness, for mounting close-nippled to 4009 cabinet, cabinet size: 16 1/4” W x 13 1/2” H x 3” D (413 mm x 343 mm x 76 mm	

* Refer to data sheet S2081-0006 for smaller battery sizes and additional details.

MOUNTING INFORMATION



4009 CONNECTION BLOCK DIAGRAM



NOTES:

1. NAC input wiring is #18 AWG minimum or to local code.
2. Refer to field wiring diagram 841-925 and Installation Instructions 574-827 for additional information.
3. Earth fault detection requires optional module 4009-9806 (for isolated connection mode) or connection to panel 0 V.
4. Separate control of strobes requires additional four circuit module. (On-until-silence for audibles, on-until-reset for strobes.)

S4009-0001-9 8/99

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All specifications and other information shown were current as of printing and are subject to change without notice.