

PCA-N3060-PSU

Power Supply Unit

Features

- UL 864, 9th edition listed
- 110 to 240 VAC input
- 4 NAC circuits, Class A (Style Z) and Class B (Style Y) supported
- Total 6.0 A for NAC circuits
- 3 programmable form C relays and 1 dedicated Trouble relay
- An auxiliary power circuit (1.0 A)
- NAC synchronization of AMSECO, GENTEX, and WHEELLOCK
- A serial output for status information transmission
- An operation status LED
- Easy installation



Description

The PCA-N3060-PSU provides 24VDC power to system cards in a FACP to maintain stable operation. The PCA-N3060-PSM consists of two parts: the Main Power Supply Unit and the AC/DC Switching Power Supply Unit. The Main Power Supply Unit provides AC input power to the AC/DC Switching Power Supply Unit. 24 VDC is generated in the AC/DC Switching Power Supply Unit, returned to the Main Power Supply Unit, and supplied to the system cards.

The AC input power is monitored by the Main Power Supply Unit for both energization and power failure conditions. In the case the AC input voltage browns out to a level that the PCA-N3060-PSU cannot operate, the Main Power Supply Unit cuts off the AC input power and switches to the standby power source (in most instances 24 VDC battery). The PCA-N3060-PSU supervises and maintains the 24 VDC batteries that supply secondary power to the system. A green LED (TXP) for operation status turns on while the PCA-N3060-PSU operates normally. The ground fault detection is provided by circuitry to all output circuits except the relay outputs in the PCA-N3060-PSU. A maximum of two units of PSU is available per FACP.

The PCA-N3060-PSU has four NAC circuits that provide 6.0 A in total. The NAC circuits are also capable of supervising and operating solenoid devices for releasing purposes. The NAC circuits operate in the reverse polarity mode to activate notification appliances and solenoid devices. Each NAC circuit is individually programmable for various purposes. A total of six cadence patterns are available for the NAC circuits: Code 3, March time, California, Continuous, 120 pulse-per-minute, 1 sec on 2 sec off. The NAC circuit is equipped with synchronization protocols (Amseco, Gentex, Wheelock).

The PCA-N3060-PSU is equipped with three programmable form C relays. These contact outputs may be programmed to operate based upon alarm, supervisory, trouble, or any other events. The PCA-N3060-PSU is also equipped with one dedicated Trouble relay. Any troubles such as device troubles and system troubles activate the Trouble relay.

The PCA-N3060-PSU also has a serial output terminal and an auxiliary power circuit. The RS-232C serial output terminal may be used for the optional printer device and other purposes. The auxiliary power circuit provides 24 VDC output for external devices such as remote annunciators, addressable devices, and notification appliances. The output is a constant 24 VDC output rated at 1.0 A.

The PCA-N3060-PSU communicates with the annunciators and the LED Driver Module via RS-485 connection. A maximum of 30 annunciators and the LED Driver Module can be connected to the PCA-N3060-PSU using a Class B, Style 4 configuration.

Ordering Information

Part No. PCA-N3060-PSU

Specifications

No.	Item	Specification
1	AC input rated voltage	110 to 240 VAC
2	AC input voltage frequency	50/60 Hz
3	Ambient operating temperature range	0 to 49 °C (32 to 120 °F)
4	AC input power	Max. 2.0 A at 120 VAC, Max. 1.0 A at 240 VAC
5	Maximum 24 VDC standby current	80 mA (not including output load)
6	Maximum 24 VDC alarm current	210 mA (not including output load)
7	NAC output current	Max. 3.0 A per circuit (*)
8	NAC output wiring style	NFPA Class A (Style Z) or Class B (Style Y)
9	Auxiliary power maximum output current	1.0 A at 24 VDC
10	Contact (Relay) output ratings	24 VDC/2.0 A, 125 VAC/0.5 A

No.	Item	Specification
11	Maximum battery charging current	2.0 A
12	Standby battery capacity range	12 to 65 AH
13	Battery fuse capacity	15 A
14	Remote annunciator wiring style	NFPA Class B (Style 4)
15	Maximum remote annunciator	30 units
16	Maximum wiring length for remote annunciator	1.2 km (with 40 Ω and 0.4 μF)
17	Communication for remote annunciator	RS-485
18	Serial connection	RS-232C
19	Dimensions	318 mm (12.52") (H) x 230 mm (9.06") (W) x 34 mm (1.34") (D) (Main Power Supply Unit only)
		222 mm (8.74") (H) x 85 mm (3.35") (W) x 40.5 mm (1.59") (D) (AC/DC Switching Power Supply Unit only)

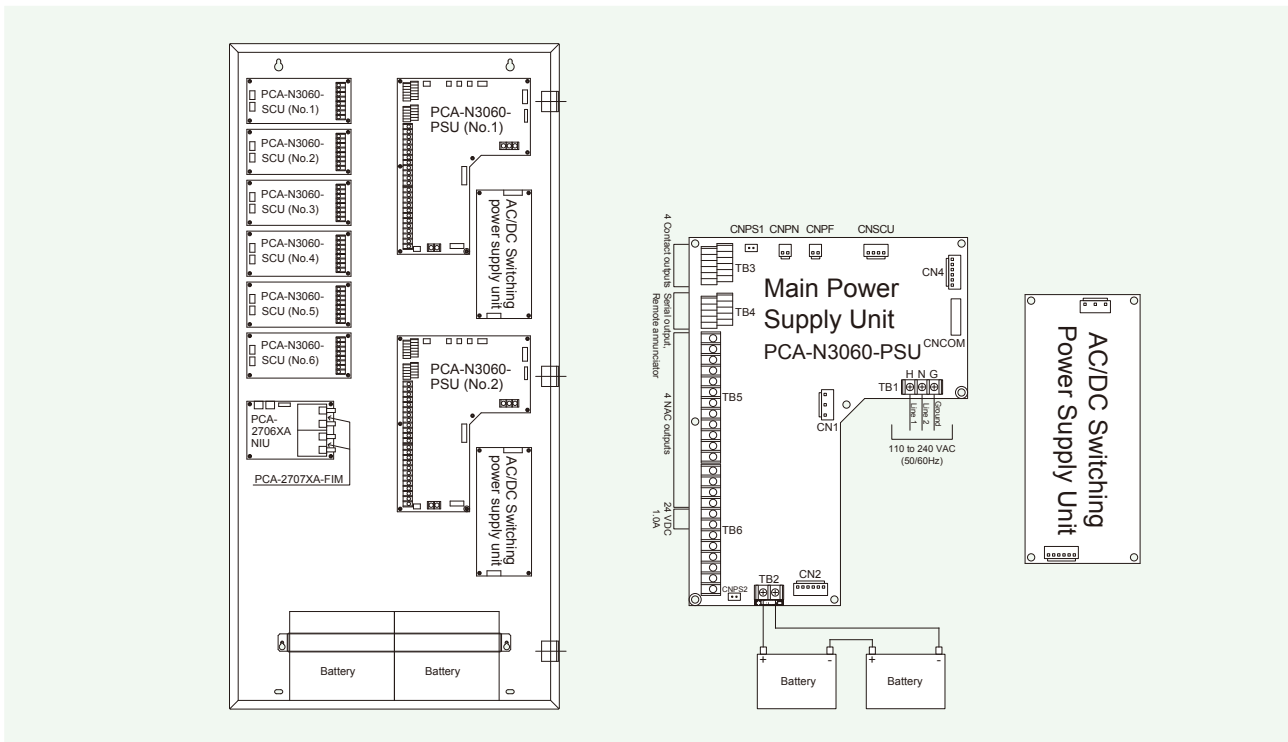
*) First unit of PCA-N3060-PSU:

- A maximum of 6.0 A is available for four circuits.
- When using the NAC synchronization in one to three out of four circuits, the total output of the synchronization circuits is limited to 3.0 A and the total output of the non-synchronization circuits is 3.0 A.
- When using all four circuits for synchronization, the total output is limited to 4.0 A.

Second unit of PCA-N3060-PSU:

- A maximum of 10.0 A is available for four circuits.
- When using the synchronization in one to three out of four circuits, the total output of the synchronization circuits is limited to 3.0 A and the total output of the non-synchronization circuits is 3.0 A.
- When using all four circuits for synchronization, the total output is limited to 4.0 A.

Installation and Wiring Information



NOTE

- The information contained herein does not purport to cover all the details or variations of the equipment described, nor to provide for every possible contingency that may be met in connection with its installation, operation or maintenance.
- Specifications are subject to change without notice. Contact Nohmi before relying on the information.
- Actual performance is based on proper application of the product by a qualified professional.
- Should further information be required or should particular concerns arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to Nohmi or your nearest distributor.

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