### DANGER!

Explosion and burn hazard. Do not short terminals. Incorrect connections may result in damage to the unit and personal injury. Before servicing this equipment, remove all power including AC, battery and phone lines. A complete functional test is required after any programming.

# Warning!

This device includes an alarm verification feature that will result in delay of the system alarm signal from a smoke detector. The total delay (control unit plus smoke detector) shall not exceed 60 seconds. No other detector type shall be connected to the circuits unless approved by the Authority Having Jurisdiction.

Circuit	Control	Smoke Detector		
(Point)	Delay [s]	Туре	Delay [s] *	
				* The delay (power-up/start-up) time marked on the label of the smoke detector(s) can be used.

#### NOTICE!

Read and understand *Installation and Operation Guide* P/N F.01U.173.607 for detailed system wiring requirements. Refer to *Operating Instruction Sheet* P/N F.01U.173.612 for panel operation.

Bosch recommends testing the entire system once a week and having a qualified technician check the system at a minimum of once every 6 months.

This system should be installed in accordance with the National Fire Alarm Code, ANSI/NFPA 72 and National Electrical Code NFPA 70. Printed information describing proper installation, operation, testing, maintenance, repair service and response to an alarm is to be provided with this equipment.

This device complies with Part 15-B, Class A of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause any harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Compatible with Part 68, FCC rules. FCC Registration Number *US:ESVAL00BFPA1000*, Ringer Equivalence: 0.0B

Suitable for use as an Auxiliary Service, Central Station, Remote Station, Proprietary and Local commercial protected premises unit fire alarm control providing the following types of service: automatic, manual, supervisory, and waterflow. Signaling types are non-coded: SM, C, M, DACT, Rev Pol, OT, MX.

### Power Supply

Connect the primary side of the transformer, either black and white wires to unswitched 120 V AC, 60 Hz, 1.1 A, or yellow and white wires to 240 V AC 50 Hz, 0.6 A circuit using wire nuts. Place a wire nut over the unused black or yellow wire.

This product requires two 12 V batteries in series, for a combined voltage of 24 V. Replace batteries every 3 to 5 years.



Recommended battery manufacturers: POWER SONIC: PS-1270, PS-12170, PS-12180 YUASA: NP7-12, NPG18-12

Battery capacity: minimum 7.0 Ah / max. 40.0 Ah Charge current: maximum 2.0 A

System is power-limited except for phone lines, battery terminals and AC primary power. Power-limited and non-power-limited circuit wiring must enter and exit from the cabinet through different knockouts and/or conduits and must remain separated in the cabinet by at least 0.25 in. (64 mm).

Primary AC and battery wires must be tied to prevent movement.

Maximum output current must not exceed maximum load current as follows:

Standby: 1.25 A Alarm:

- 5.0 in total
- 4.0 A shared between NACs, Option Bus and AUX - 1.0 A shared between panel and SLC(s)

#### Fuse: 15 A blade type

**Note:** Earth grounds and panel grounds are isolated.

Shared cable is not recommended for Option Bus, addressable points bus, telephone, or NAC wiring. Avoid shielded or twisted-pair wire except for special applications where a reduced length of wiring (roughly 50%) is acceptable for tolerating a harsh electrical environment.



AUX Power Out 2 x max. 500 mA @ 24 V, 17 to 31 V, non-supervised FWR = non-switched, FWR RST = switched, filtered AUX FWR - S-FWR + S-RST - S-RST + S-



# City Tie Wiring in Local Energy Mode Note: The shunt connection is recognized only as a supplementary signaling unit as part of a local control unit and is not recognized as an auxiliary control unit connection per NFPA 2.

Mainboard Relays	RELAY1	RELAY2	RELAY3
5 A @ 30 V DC	ØØØ	øøø	ØØØ
Default setting:	Fire Alarm	Trouble (energized)	Super- visory

# **Option Bus**

One Class B Style 4, max. 500 mA @ 12 V DC, supervised. Observe maximum wiring distance!



#### Notification Appliance Circuits

Two Class A Style Z, or two Class B Style Y, or one Class A Style Z and one Class B Style Y, 24 V FWR, supervised, - non-synchronized: maximum 2.5 A per NAC circuit, - synchronized: maximum 2.75 A NAC 1 + NAC 2 in total, total 4.0 A shared between NAC, AUX and Option Bus. Refer to the *FPA-1000-UL NAC Compatibility List* (P/N F.01U.075.636) for compatible notification appliances. EOL: Bosch EOL 2.2K (F.01U.034.504)



### **Signaling Line Circuits**

Digital Communication Protocol (DCP), per FPE-1000-SLC one Class A Style 6 or 7, or one or two Class B Style 4, supervised. SLC voltage: Nominal 39 V DC (30 to 40 V DC) SLC current: 260 mA (per FPE-1000-SLC) Observe maximum wiring distance! Refer to the *FPA-1000 Installation and Operation Guide* for compatible devices (P/N F.01U.173.607).

