



PCF 1,2 & 4 Series Emergency Power Systems

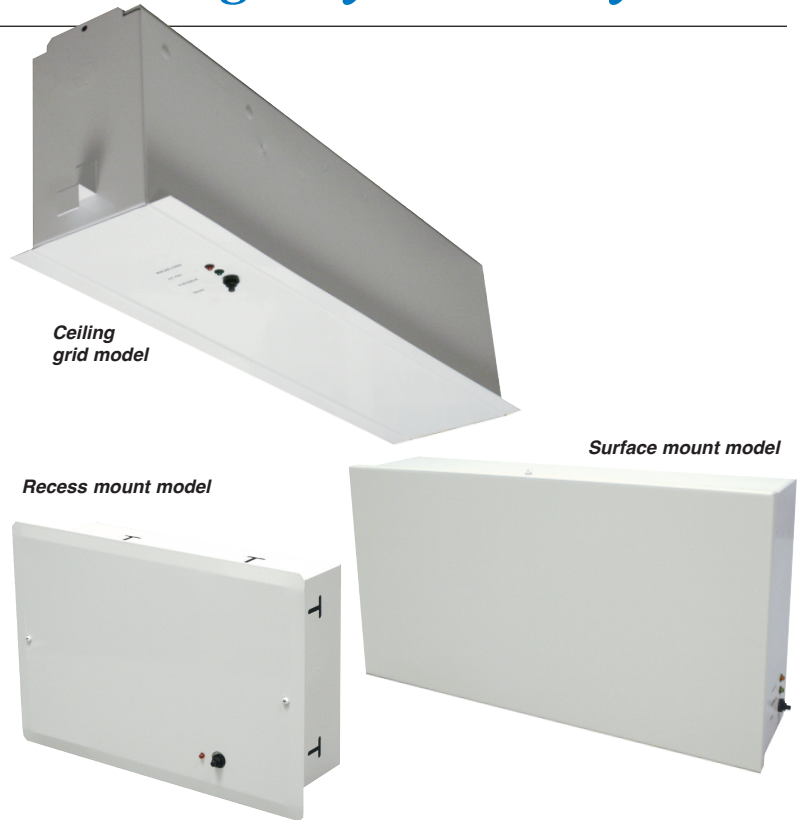
Description

Mini inverter systems for powering from 9 to 32 watts of incandescent and many common compact fluorescent and F6T5 lamp types. Models for ceiling grid, recessed and surface mounting.

Features

- For powering Incandescent and fluorescent fixtures*
- Unit capacities up to 32 watts
- Unit can be located up to 1000 feet from fixture(s)
- Surface, recessed or ceiling grid mounted models
- Standard 120 VAC input/output (277 VAC available, consult factory)
- Fused output load connections
- Lumen output from fixture is 91% of nominal
- Operates incandescent and many common compact fluorescent and F6T5 lamps
- Normally-on and/or Normally-off load output
- Provisions for local switching capability- Always on during emergency conditions regardless of switch position
- Emergency fixtures can be on, off or switched
- Solid state, line latched low voltage disconnect provides protection against battery deep discharge
- Long life maintenance free lead calcium battery
- Momentary Test Switch and AC ready indicator light
- Meets NFPA Life safety Code 101, OSHA, NEC, State and local Codes
- UL 924 listed

* Consult factory for compatibility with other lamp types



Ordering Guide

Model No.	Output Volts	Watts/VA For 1 1/2 Hrs.	Watts/VA For 2 Hrs.	Watts/VA For 3 Hrs.	Watts/VA For 4 Hrs.	Mounting Type	Weight (Lbs.)
PCF-1T	120 ⁽¹⁾⁽²⁾	9	--	--	--	Ceiling Grid	19
PCF-1R	120 ⁽¹⁾⁽²⁾	9	--	--	--	Recessed	19
PCF-1S	120 ⁽¹⁾⁽²⁾	9	--	--	--	Surface	17
PCF-2T	120 ⁽¹⁾⁽²⁾	18	15	13	9	Ceiling Grid	21
PCF-2R	120 ⁽¹⁾⁽²⁾	18	15	13	9	Recessed	21
PCF-2S	120 ⁽¹⁾⁽²⁾	18	15	13	9	Surface	19
PCF-4T	120 ⁽¹⁾⁽²⁾	32	22	17	13	Ceiling Grid	23
PCF-4R	120 ⁽¹⁾⁽²⁾	32	22	17	13	Recessed	23
PCF-4S	120 ⁽¹⁾⁽²⁾	32	22	17	13	Surface	21

(1) See Specifications on back of sheet for 120 VAC "Lamp Types Operated". 277 VAC also available for operation of some common lamp types. Consult factory.

(2) Output AC voltage must match PCF unit input voltage.

NOTE: All product specifications shown are subject to change without notice.

Options⁽³⁾⁽⁴⁾

Add Suffix	Description
-TD1	15-Minute Retransfer Delay - 120VAC
-SP	Special Paint (consult factory)

(3) Other options available. Consult factory.

(4) Some options may impact product UL listing. Consult factory.

Accessories

Order Model	Description
RT	Remote Test Switch

Specifier Reference

Project: _____
 Fixture Type: _____
 Model No.: _____
 Comments: _____

Application

The PCF series is designed to back up fluorescent and incandescent fixtures up to 32 watts. The PCF unit provides AC power to the fixture, allowing it to be remote mounted up to 1,000 feet away. Unlike a ballast fluorescent emergency pack, the PCF provides power to the input side of the fixture, (including the ballast). The PCF Series is available in different housings to enable it to conform to any mounting requirements. It is available in a recessed, surface or T-grid ceiling housing. All PCF systems provide emergency illumination for a minimum of 90 minutes.

Lamp Types Operated

PCF models will operate incandescent lamps as well as the 120 VAC fluorescent lamp types outlined in the following table:

Model	120 VAC Lamps Operated	Quantity
PCF-1	PL-5, PL-7 or PL-9 & F6T5	1
PCF-2	PL-5, PL-7 or PL-9 & F6T5	2
PCF-4	PL-5, PL-7 or PL-9 & F6T5	4
	PL-13	1
	QD18	2
	QD-26	1

277 VAC input/output is available on all PCF models for operation of selective lamp types. Consult factory for lamps operated at 277VAC or for PCF unit compatibility with all other lamp types.

Construction

Housing: Heavy duty steel cabinet is finished in neutral cream baked-on powder paint providing scratch and corrosion resistance. Optional special color paint (-SP) finishes are available, consult factory.

Installation

Mounting: The PCF Series provides models for ceiling grid, recess and surface mounting.

Ceiling Grid Models: Ceiling grid models drop on to T-grid channels by means of mounting tabs. Tabs on top of the housing provide holes for connecting security wires.

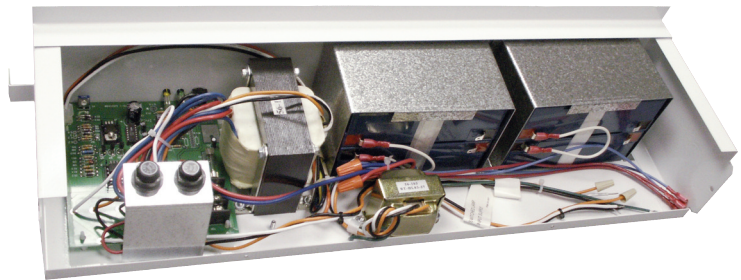
Recess Models: Recess models provide T-slot mounting holes on all four sides.

Surface Models: Surface mount models are designed for mounting to walls by means of keyhole slots provided in the back of the unit housing.

Wiring: Wiring is provided for by conduit knockouts in the unit housing. See Dimension illustrations for location details. Knockouts are provided in the back of the housing for rear wiring from standard electrical boxes on surface mount models.

Code Information

All models are UL924 Listed and meet NFPA 101 Life Safety Code, NEC, OSHA, Local and State Codes



Charger and Electronics

Charger Type: All PCF Series units feature a fully automatic, temperature compensating, variable rate float charger

Utility Input: 120VAC, 60 Hz. (277VAC available. Consult factory)

Power Consumption (Charger Only): 15 watts (maximum)

Temperature Range: 68°F to 86°F (20°C to 30°C)

Recharge Duty Cycle: 24 hours

Load Transfer: All models utilize mechanical relays for load transfer and provide fused AC output load connections.

Controls: Momentary test switch and LED AC-On indicator light

Safety Circuitry:

AC Lockout: Prevents battery discharge prior to initial unit power-up saving installation time.

Low Voltage Battery Disconnect: Protects the battery from being severely damaged by deep discharge during prolonged power failures.

Brownout Protection: Automatically switches the unit to emergency mode when utility voltage is reduced to the point at which most fluorescent light fixtures would extinguish.

Operation

Upon failure of the normal utility power the PCF is instantly turned on by a solid state switching circuit and provides a minimum of 90 minutes of emergency power to the connected load. Lumen output will be maintained to 91% of the lamp's rating throughout the entire duration. A solid state low voltage disconnect circuit is used to protect the battery from being severely damaged by a deep discharge. When normal utility power is restored, the fully automatic, temperature compensated, variable rate float charger begins to restore the battery; bringing it to full charge within 24 hours. A brownout sensing circuit insures proper operation during "low line" conditions.

Battery

Standard Battery: Sealed lead calcium maintenance free battery designed to provide many years of dependable service.

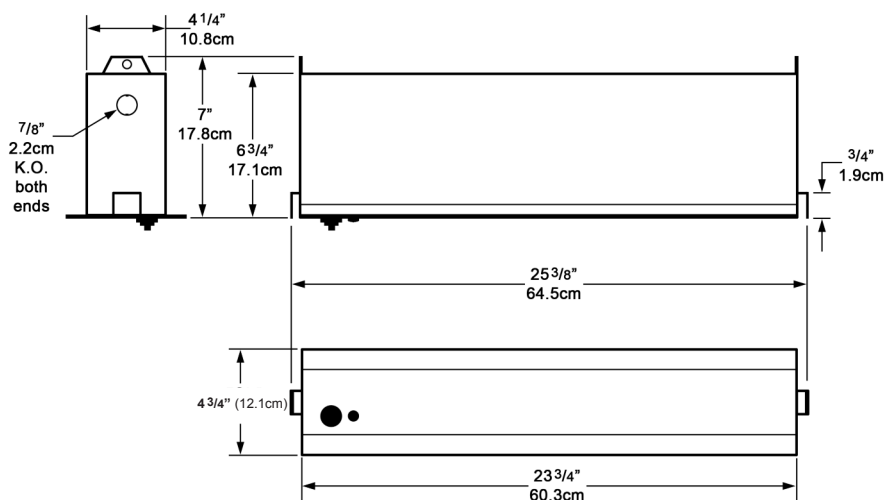
Warranty

Unit: (excluding lamps) 3-years full coverage against defects in materials and workmanship from date of shipment

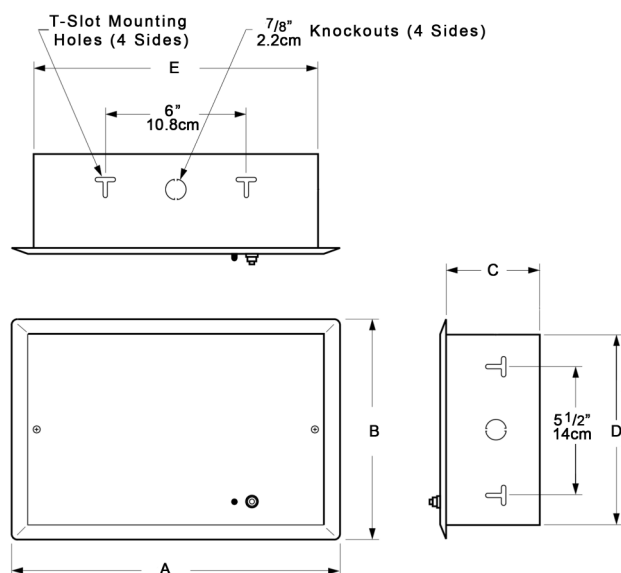
Battery: 3 years full warranty plus an additional 7 years of pro-rata coverage

Dimensions

Ceiling Grid Models (T)

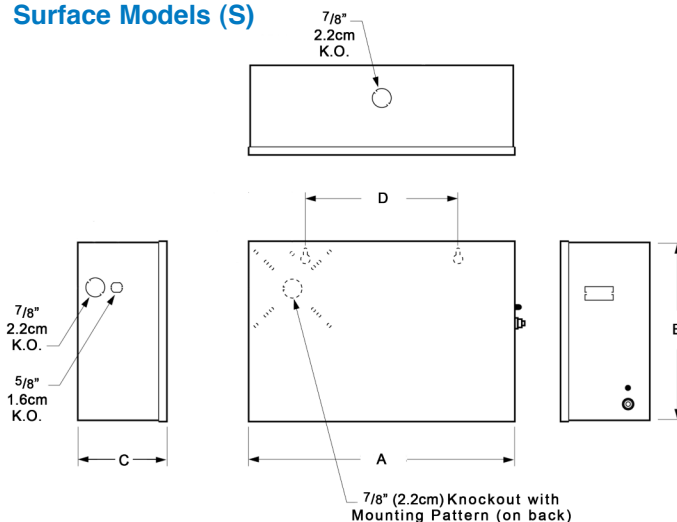


Recess Models (R)



Model	A	B	C	D	E
PCF-1, 2, 4	14" 35.6cm	9 1/2" 24.1cm	4" 10.2cm	8" 20.3cm	12 1/8" 30.8cm

Surface Models (S)



Model	A	B	C	D
PCF-1, 2, 4	12 5/16" 31.3cm	8 1/8" 20.6cm	4 1/8" 10.5cm	7" 17.8cm

Suggested Specifications

A mini inverter system shall be supplied capable of powering any incandescent or fluorescent lighting fixture at not less than 91% of their nominal lumen rating during the full 90 minutes emergency discharge cycle. System output will be rated at (9)(18)(32) Watts/VA for 90 minutes and provide fused output connections to the load. The system's voltage rating shall be 120 VAC input/output. The inverter system shall allow for connected emergency fixture(s) to be on, off, switched or dimmed without affecting lamp operation during a power failure. Upon utility power loss, the emergency fixture shall deliver the full 91% of its rated output regardless of the local switch's position.

Specialty housings shall be supplied to satisfy ceiling grid, recessed or surface mounted installation requirements. The Inverter system shall be capable of being located up to 1,000 feet away from the emergency fixture without any loss in lamp output.

Inverter system electronics shall include a fully automatic, temperature compensating variable rate battery charger providing an AC lockout feature as well as low battery voltage disconnect, DC overload, short circuit and brownout protection as standard. The system shall utilize a sealed lead calcium battery with a 10-year design life. The Inverter system shall be UL924 Listed and labeled.

The mini inverter system shall be PCF Series model _____.

PCF Wiring Diagram

Note: Input and Output AC voltages must be identical

