

E.W. Howell Co., LLC

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REQUEST FOR INFORMATION**No. 00040****TITLE:** Lighting Fixtures Type "FBB"&"FPP"**DATE:** 2/23/2010**PROJECT:** BNL CCWF-II**JOB:**

TO: Attn: Alan Raphael
 Brookhaven National Laboratory
 Brookhaven Sciences Associates, LLC
 Project Modernization Office
 Upton, NY 11973-5000
 Phone: 631-344-5854

STARTED:**COMPLETED:****REQUIRED:** 3/2/2010**WORK****IMPACT:** Unknown**SCHEDULE****IMPACT:** Unknown**COST****IMPACT:** Unknown**QUESTION:**

2/23/2010

Lighting Fixtures Type "FBB" & "FPP"

After the release of the types "FBB" and "FPP" fixtures, the manufacturer has come back to me and told me that they can not fit the original emergency battery pack (EL14) into these fixtures. The only battery pack that will fit is the PS600QD. I have enclosed a cut for your review. Please advise if this is acceptable. If not please provide an alternate fixture type.

CC: File

PROPOSED SOLUTION: THE PROPOSED BATTERY PACK # PS600QD IS ACCEPTABLE WITH THE FOLLOWING CONDITIONS: PROVIDE TWO (2) BATTERY PACKS # PS600QD FOR EACH LIGHT FIXTURE TYPES "FBB" & "FPP". CONNECT EACH BATTERY PACK TO EACH OF THE OUTERMOST LAMPS ON THE 3-LAMP FIXTURE AND TO EACH LAMP ON THE 2-LAMP FIXTURE. MINIMUM (APPROX) TOTAL LUMENS FOR EMERGENCY LIGHTING PER LIGHT FIXTURE = 1200L.

ANSWER:

P. M. Q. (2010)
 2/23/2010

Requested By: E.W. Howell Co., LLC

Signed: Lauren Bergin
Lauren BerginDate: 2/23/2010



FEATURES

INTENDED USE

Specification grade fluorescent battery pack operates one or two lamps (4' or shorter) or one 8' lamp. Factory or field installed within fluorescent fixture ballast channel. Upon interruption of normal power, battery pack automatically strikes and operates at reduced light output, providing optimum glare-free illumination for 90 minutes.

CONSTRUCTION

Durable thermoplastic/metal housing resists impact, scratches and corrosion. UL94V-0 flame rating.

Reduced-profile footprint fits in the tightest applications.

Polarized quick-connect pilot light/test switch assembly simplifies installation.

Pilot light and test switch provide visual and manual means of monitoring system operation.

U.S. Patent No. 6,522,147.

PERFORMANCE

Operates one or two 2' - 4' fluorescent T8 - T12 lamps, one 2' - 4' fluorescent T5, T8, or T12, HO, long compact (biac) lamp or one 6' - 8' fluorescent T8 - T12 lamp for 90 minutes. Compatible with T8 and T5 electronic, T12 magnetic, instant start, rapid start, and slimline ballasts.

BATTERY

Sealed, maintenance-free, high-temperature nickel-cadmium battery ensures long life over wide temperature ranges.

Automatic battery recharge after 90-minute discharge. Fully charged after 72 hours.

ELECTRONIC

Dual-voltage input capability (120V or 277V).

Constant current-type charger. Capacitive input circuit provides high efficiency and reliable operation.

High-efficiency push-pull inverter is the most effective method of converting DC power to AC power. It provides maximum light output, battery life and reliability.

INSTALLATION

Patent-pending QUICK DISCONNECT connector system allows for quick and easy replacements at end of life without rewiring (not available with DW option).

Mounts concealed within fixture wireway for clean appearance and protection against vandalism. Two 1/2" holes in fixture channel permit mounting of test switch/pilot light behind fixture lens.

Compact size (9.4" L x 2.19" W x 1.18" H) fits in a variety of fluorescent fixtures: troffers, volumetric recessed, industrials, commercials and strips.

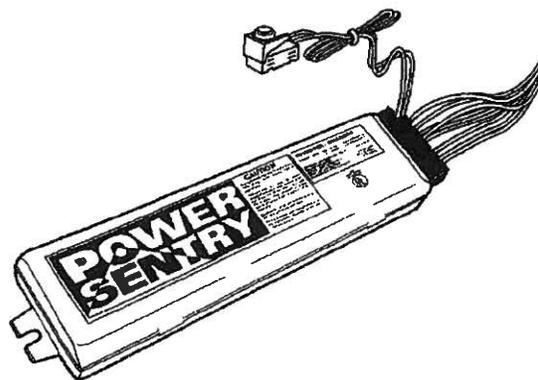
Unit wires two ways: on night light circuit (permanently energized) or on switchable circuit (unswitched circuit to battery charger and switched circuit to the fixture ballast). Unit will strike normally off lamp.

Unit mounting centers are identical to a standard ballast.

| | |
|----------------|------|
| Catalog Number | |
| Notes | Type |



600 Lumen Reduced-Profile Fluorescent Battery Pack PS600QD



LISTING

UL listed. Meets UL 924, NFPA 101 (current Life Safety Code), NEC and OSHA illumination standards.

Standard unit is UL approved for installation in sealed and gasketed fixtures. The DW option is UL approved (0-50°C) for installation in wet and damp location listed fixtures.

See PSW600DW specification sheet for product that is UL approved for use in wet- and damp-location fixtures.

WARRANTY

Five-year total customer satisfaction warranty.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: PS600QD SD

| PS600QD | |
|---|---|
| Designation | Options |
| PS600QD Reduced-profile battery pack with Quick Disconnect | SD Self-diagnostics ¹ |

NOTES:

- Self-diagnostics (PSSD) module ships separately. See PSSD Inverter Accessory spec sheet for details on self-diagnostics module.
- See Inverter Accessories specification sheets for details on other compatible devices.

Accessories²

Order as separate items.

| | |
|-------------|--|
| ELA TSPLP | Remote or replacement test switch pilot light; Mounts up to 25' away from fixture |
| ELA TSPLPSD | Remote or replacement test switch pilot light for self-diagnostics; Mounts up to 25' away from fixture |
| ELA PSRME | Remote mounting enclosure |
| ELA PSMKSD | External mounting kit for self-diagnostics module |
| PSSD | Field-installable self-diagnostic module |

PS600QD Fluorescent Battery Packs

SPECIFICATIONS

BATTERY

Sealed Nickel-Cadmium

| Voltage | Shelf life ¹ | Expected life ¹ | Maintenance | Optimum temperature ² |
|---------|-------------------------|----------------------------|-------------------|----------------------------------|
| 4.8 | 3 years | 7-9 years | none ³ | 32-100°F |

Notes:

- At 77°F.
- Optimum ambient temperature range where unit will provide capacity for 90 minutes. Higher and lower temperatures affect life and capacity. Consult factory for detailed information.
- Periodic system status test recommended.

ELECTRICAL

| Volts | Maximum AC input Amps | Watts |
|---------|--------------------------|-------|
| 120/277 | .29 | 3.0 |

LAMP COMPATIBILITY

| Lamp Type | Wattage | Emergency Operation | Nominal Initial Lumen Output ¹ |
|----------------------|---------|---------------------|---|
| 24-48" T5 | 14-28 | ■ | 540 |
| 24-48" T5HO | 24-54 | ■ | 629 |
| U-Lamp T8 | 16-31 | ■ ● | TBD |
| 24"-48" T8 | 17-32 | ■ ● | 632 |
| 60"-96" T8 | 40-59 | ■ | TBD |
| 24"-48" T12 | 20-40 | ■ ● | 645 |
| 24"-48" T12HO | 35-60 | ■ | 401 |
| Long Compact (4-pin) | 18-50 | ■ | 687 |

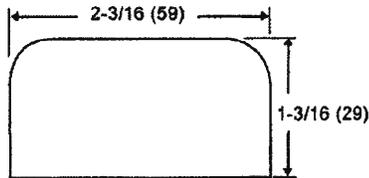
- One-lamp emergency operation for 1 - 4 lamp ballasts.
 - Two-lamp emergency operation for 2 - 4 lamp ballasts.
- Tested and approved lamp/ballast combinations. Consult Lithonia Lighting representative for additional lamp/ballast combination compatibility not shown.

Notes:

- Initial lumen output is impacted by multiple variables including fixture type, lamp type, and ambient temperature.

MOUNTING

All dimensions are inches (millimeters).



Cross section end view

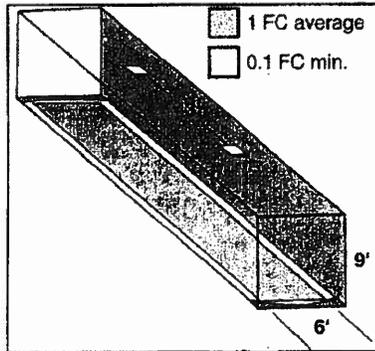
Length: 9.40 inches
Shipping weight: 1.5 lbs (0.68 kg).

RECOMMENDED SPACING

One Footcandle Average Spacing Guidelines PS600QD

| | 2GT8332 | 2SP8332 | 2PM3N332 | 2AV332 | 2PMO332 |
|-----------------|---------|---------|----------|--------|---------|
| Open Office 2x4 | 32 | 35 | 34 | 26 | 35 |
| Corridor 2x4 | 40 | 43 | 53 | 34 | 40 |
| Open Office 2x2 | 32 | 33 | 29 | 29 | 28 |
| Corridor 2x2 | 39 | 40 | 35 | 29 | 28 |

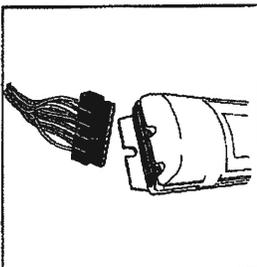
Corridor Spacing



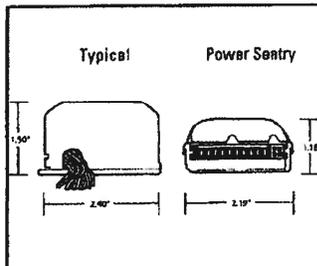
Fluorescent Battery Pack: PS600QD
Fluorescent Fixture: Lensed Troffer
Lamp Type: F32T8

Meets Life Safety Code standard minimum illuminance of 0.1FC and average illuminance of 1.0FC. Assumes 3 T8 lamps in each fixture, 3'Wx100'L corridor, 6-foot wide path of egress, ceiling height 9' and reflectances of 80/50/20.

KEY FEATURES

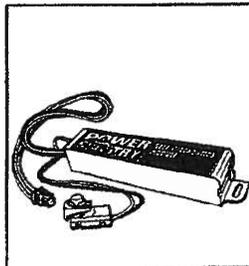


New Quick-Disconnect wiring system



New reduced-profile design fits in the tightest of applications.

KEY OPTIONS



Self-diagnostics module.



An Acuity Brands Company

Sheet #: PS600QD

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Lithonia Lighting

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