

## Type A+B LED PL Retrofit Lamp Installation Instructions

### INSTRUCTION

Thank you for selecting LED type A+B PL Lamp. Please install and use the product according to the instructions below to ensure the correct installation and function of our LED product. Failure to follow these instructions will void your warranty. We take no responsibility for inappropriate use and/or installation of the product, and for any associated damage caused by such actions.

Type A+B LED PL retrofit lamps can be used as a replacement for 4-pin compact fluorescent bulbs (CFLs) and are compatible with both electrical ballasts and 120-277V line voltage. Installation can be direct plug-and-play with a working and compatible ballast (list below), or the ballast can be bypassed in the case of a failing or incompatible ballast.

Universal G24 and GX24 4-pin base retrofits G24q-1, G24q-2, G24q-3, GX24q-1, GX24q-2, and GX24q-3.

### Warnings

- Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of the luminaire's electrical systems. Contact a certified electrician for installation, do not attempt to install if unqualified.
  - The products were intended to retrofit surface mount, Type IC or non-IC recessed mount Listed fluorescent luminaires. Horizontal version PL lamp that uses maximum two lamps, with the two lamps spaced 1 mm (0.04") minimum apart. The minimum lamp compartment dimensions are 155\*140 mm (6.1\*X5.6"). Vertical version PL that uses only one lamp, and the lamp compartment dimensions are 145\*180mm (5.7\*X7.1").
  - Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation. To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
  - Installers should not disconnect existing wires from lampholder terminals to make new connections at the lampholder terminals. Instead, installers should cut existing lampholder leads away from the lampholder and make new electrical connections to lampholder lead wires by using applicable connectors.
- Lamp replacement instructions shall indicate the manufacturer's custom lamp part number, and a method to order replacement lamps by phone, website and/or email. These instructions shall be included on an information sheet packaged with each unit.
- Risk of fire - if the lamp or luminaire exhibits undesirable operation (buzzing, flickering, etc.), immediately turn off power, remove lamp from luminaire and contact manufacturer. This lamp only operates on electronic ballasts. If lamp does not light when the luminaire is energized, remove lamp from luminaire and contact lamp manufacturer or qualified electrician. NOT FOR USE WITH DIMMERS. THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS.

Note: Ballast bypass instructions only apply to fixtures with incompatible or failed ballasts.

### Bypass ballast (Recommended)

Installation Instructions:

1. Make sure the circuit breaker that supplies power to the fixture is turned off.
2. Remove trim and existing lamp(s) from recessed fixture. Drop housing from plaster frame.
3. Remove inner junction box cover and disconnect ballast from input wiring and lampholder leads. Dispose of removed ballast and lamps in accordance with government regulations in your area.
4. Connect input wiring to lampholder leads according to the appropriate diagram below. Place wires and connections back in wiring box and replace cover.
5. Reinstall housing and trim.
6. Install your new LED Hybrid PLC lamps.
7. Apply relamping Label on a visible location inside the fixture.

THIS LUMINAIRE HAS BEEN MODIFIED AND CAN NO LONGER OPERATE THE ORIGINALLY INTENDED LAMP.

8. Turn power on at the breaker box and turn on the lights.

Figure 1: Retrofit with One Lamp (G24q Base)

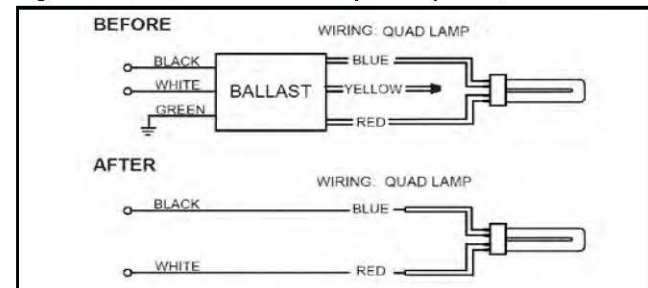
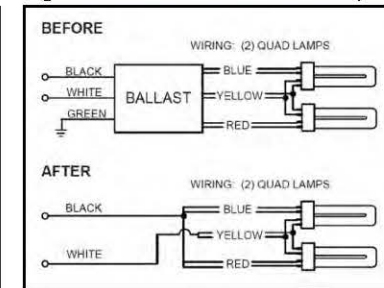


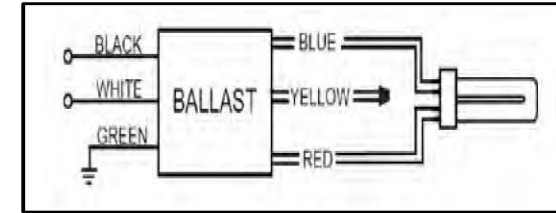
Figure 2: Retrofit with Two Lamps (G24q Base)



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### Direct plug-and-play with ballast:

#### Wiring:



### Compatible Ballasts List:

Ballast Description			Compatibility Test Result			
Electrical Characteristic			1-Lamp		2-Lamp	
Brand	Model	Volt	120 VAC	277 VAC	120 VAC	277 VAC
LUMA PRO	16X954	120-277V	✓	×	✓	✓
LUMA PRO	4KGJ7	120-277V	✓	✓	✓	✓
LUMA PRO	4KGJ8	120-277V	✓	✓	✓	✓
LUMA PRO	16X959	120-277V	✓	✓	✓	✓
Universal/Triad	C213UNVME	120-277V	✓	✓	✓	✓
Universal/Triad	C218UNVME	120-277V	✓	✓	✓	✓
Universal/Triad	C242UNVME	120-277V	✓	×	✓	✓
Universal/Triad	C2642UNVME	120-277V	✓	✓	✓	✓
HOWARD INDUSTRIES	EP2/13CF/MV	120-277V	✓	✓	✓	✓
HOWARD INDUSTRIES	EP2/18CF/MV	120-277V	✓	✓	✓	✓
HOWARD INDUSTRIES	EP2/26CF/MV/2	120-277V	✓	✓	✓	✓
GE	GEC218MVPSBES	120-277V	✓	✓	✓	✓
PHILIPS/ADVANCE	ICF-2S18-H1-LD	120-277V	✓	✓	✓	✓
PHILIPS/ADVANCE	ICF-2S26-H1-LD	120-277V	✓	✓	✓	✓
PHILIPS/ADVANCE	ICF-2S42-M2-LD	120-277V	✓	×	✓	✓
PHILIPS/ADVANCE	ICF-2S13-H1-LD	120-277V	✓	✓	✓	✓
ORSRAM/SYLVANIA	QTP1/2X18CF/UNVDM	120-277V	✓	✓	✓	✓
ORSRAM/SYLVANIA	QTP2X26CF/UNVDM	120-277V	✓	✓	✓	✓
ORSRAM/SYLVANIA	QTP1/2X13CF/UNVDM	120-277V	✓	✓	✓	✓
HATCH	HC226PS/UV/D	120-277V	✓	✓	✓	✓
CH	ACT2S26PSUNV	120-277V	✓	✓	✓	✓
STANDARD	31279STD	120-347V	✓	✓	✓	✓
STANDARD	31527STD	120-347V	×	✓	×	✓
KEYSTONE	KTEB-213-UV-PS-DW	120-277V	✓	✓	✓	✓
KEYSTONE	KTEB-218-UV-PS-DW	120-277V	✓	✓	✓	✓
KEYSTONE	KTEB-226-UV-PS-DW	120-277V	✓	✓	✓	✓
KEYSTONE	KTEB-218-UV-RS-DW	120-277V	✓	✓	✓	✓
FULHAM	RHAUNV226C	120-277V	×	×	×	✓
FULHAM	WH2120L	120-277V	✓	×	✓	×
FULHAM	WH2120C	120-277V	✓	×	✓	×
FULHAM	RHAUNV213C	120-277V	×	×	×	✓
FULHAM	RHA-UNV-218-C	120-277V	×	×	✓	✓
FULHAM	WH3-120-C	120-277V	✓	×	✓	×
FULHAM	WH2-277-L	120-277V	×	✓	×	×
FULHAM	WH3-277-L	120-277V	×	✓	×	✓
FULHAM	WH4-277-L	120-277V	×	✓	×	✓
FULHAM	RHA-UNV-242-C	120-277V	×	×	✓	✓

#### Remarks:

Manufacturer of LED Type A+B PL G24Q Lamps has a limitation of compatibility, not compatible with ALL ballasts, they were tested for compatibility with the above listed electronic ballasts. Ballasts that do not appear on the chart might still be compatible but have not been tested. It is a general recommendation to perform a test on-site before installing the LED lamps.