

# INSTRUCTIONS

## PLC HYBRID INSTALLATION

# RAB®

RAB Lighting is committed to creating high-quality, affordable, well-designed and energy-efficient LED lighting and controls that make it easy for electricians to install and end users to save energy. We'd love to hear your comments. Please call the Marketing Department at 888-RAB-1000 or email: [marketing@rablighting.com](mailto:marketing@rablighting.com)



PLC-7-O-8XX-HYB-G24Q



PLC-9.5-O-8XX-HYB-G24Q



PLC-9-O-8FA-HYB-G24Q

### IMPORTANT

#### **READ CAREFULLY BEFORE INSTALLING LAMPS. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

RAB lamps must be wired in accordance with the National Electrical Code and all applicable local codes. Proper grounding is required for safety. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

**WARNING: Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.**

**Risk of fire or electric shock. Install this kit only in luminaires that have the construction features and dimensions shown in the photographs and/or drawings and where the input rating of the retrofit kit does not exceed the input rating of the luminaire. 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 lampholder terminals. Instead installers should cut existing lampholder leads away from the lampholder and make new electrical connections to lampholder lead wires by employing applicable connectors.**

**THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION. PRODUCT MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE APPLICABLE AND APPROPRIATE ELECTRICAL CODES. THE INSTALLATION GUIDE DOES NOT SUPERSEDE LOCAL OR NATIONAL REGULATIONS FOR ELECTRICAL INSTALLATIONS.**

**Installers should examine all parts that are not intended to be replaced by the retrofit kit for damage and replace any damaged parts prior to installation of the retrofit kit.**

**MAXIMUM OF 12 AWG THROUGH BRANCH CIRCUIT CONDUCTOR SUITABLE FOR 60°C PERMITTED IN BOX.**

**THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS.**

#### **TYPE A / B LAMP**

**"TYPE A LAMP - Intended for direct substitution of a fluorescent lamp and operating from the integral ballast without any modifications to the fluorescent luminaire."** or

**"TYPE B LAMP - Intended for operation in luminaires with traditional fluorescent-type lampholders wired directly to the branch circuit. This includes both factory-wired luminaires as well as those converted for this purpose under a retrofit program." Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.**

**CAUTION: RISK OF FIRE. USE ONLY IN PLACE OF FLUORESCENT LAMPS SPECIFIED ON (LAMP) LABEL.**

**DIRECT REPLACEMENT FOR 26W/8T4/Q/G24q-3\13W/6T4/Q/G24q-1\18W/7T4/Q/G24q-2 LAMPS ONLY.**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

**NOTE: This retrofit kit is for a 4 PIN MOUNT and can replace 13W, 18W, 26W CFL Lamps with G24q and GX24q bases. When shift from electrical ballast to VAC 120-277V or magnetic ballast, stick the fixture replacement label.**

*Note: These instructions do not cover all details or variations in equipment nor do they provide for every possible situation during installation, operation or maintenance.*

# INSTRUCTIONS

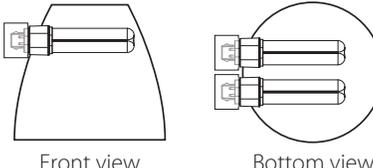
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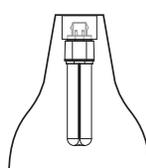


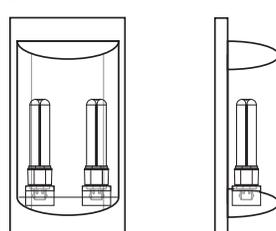
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### COMPARTMENT DIMENSION

Please make sure the minimum dimensions of the lamp compartment in the non-enclosed fixture meet the below guidelines.

| Non-enclosed Fixture Horizontal Installation<br> | Model Number                     |                   | PLC-7-O-8XX-HYB-G24Q | PLC-9.5-O-8XX-HYB-G24Q<br>PLC-9-O-8FA-HYB-G24Q |
|--|----------------------------------|-------------------|----------------------|--|
|  | Front view                       | Fixture Dimension | Diameter             | 6.12 in  |
| Height   |                                  |                   | 4.75 in              | 4.75 in  |
| Bottom view  | Maximum Lamps in Fixture         |                   | 2                    | 2  |
|  | Lampholder-to-Lampholder Spacing |                   | 0.375 in             | 0.375 in                                       |

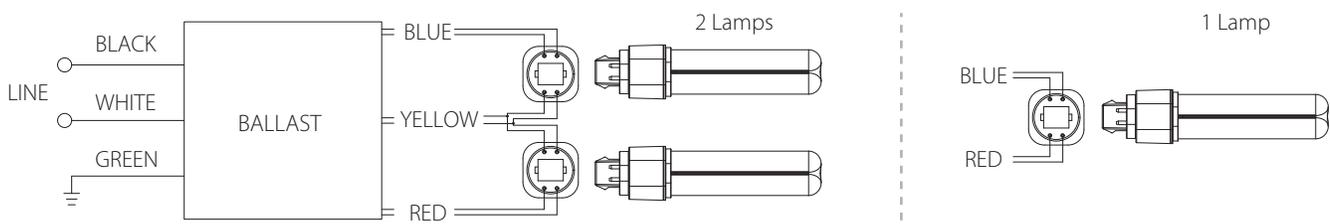
| Non-enclosed Fixture Vertical Installation<br> | Model Number |                   | PLC-7-O-8XX-HYB-G24Q | PLC-9.5-O-8XX-HYB-G24Q<br>PLC-9-O-8FA-HYB-G24Q |
|---|--------------|-------------------|----------------------|--|
|   | Front view   | Fixture Dimension | Diameter             | 4.50 in  |
| Height  |              |                   | 8.06 in              | 9.06 in  |
| Maximum Lamps in Fixture  |              | 1                 | 1                    |  |
| Lampholder-to-Lampholder Spacing  |              | N/A               | N/A                  |  |

| Enclosed Fixture Installation<br> | Model Number                     |                   | PLC-7-O-8XX-HYB-G24Q | PLC-9.5-O-8XX-HYB-G24Q<br>PLC-9-O-8FA-HYB-G24Q |
|---|----------------------------------|-------------------|----------------------|--|
|   | Front view                       | Fixture Dimension | Length               | 11.81 in                                       |
| Width   |                                  |                   | 6.31 in              | 6.31 in  |
| Height  |                                  |                   | 2.75 in              | 2.75 in  |
| Side View   | Maximum Lamps in Fixture         |                   | 2                    | 2  |
|   | Lampholder-to-Lampholder Spacing |                   | 1.87 in              | 1.87 in  |

### INSTALLATION FOR TYPE A USE

1. Switch-off power to luminaire.
2. Remove the cover lens (if provided).
3. Carefully remove all existing CFL lamps from luminaire. Note: Verify that the ballast is compatible with LED PL lamps, see the compatibility list at [rablighting.com](http://rablighting.com)
4. Confirm the lampholder has a G24q or GX24q socket.
5. Insert the LED PL lamp into the open socket within the fixture. Ensure pins are firmly seated in the lampholder.
6. Select desired color temperature. (Do not select when power on).
7. Switch on power to luminaire and installation is now complete.
8. Models PLC-7-O-8XX-HYB-G24Q, PLC-9.5-O-8XX-HYB-G24Q, PLC-9-O-8FA-HYB-G24Q are intended to be used in listed recessed and surface mounted luminaires.
9. Recessed lum must be non-insulation contact only. All luminaires should and utilize a maximum of two lamps.

### WIRING DIAGRAM TYPE A USE



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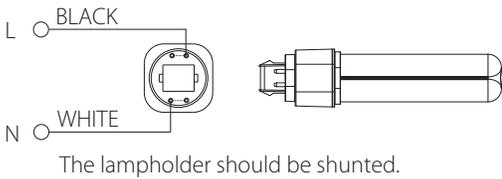
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### INSTALLATION FOR TYPE B USE

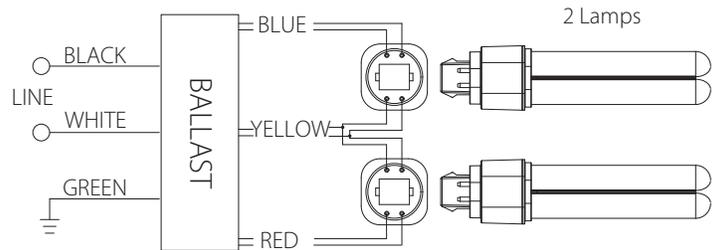
1. Read all WARNINGS before continuing this section.
2. Ensure fixture is powered by 120-277V.
3. Make sure POWER IS TURNED OFF AT THE SOURCE.
4. Remove lens if applicable, remove cover and fluorescent lamp.
5. Before rewiring, check the ballast type and refer to the relevant diagram.
6. Before rewiring, check the number of lamps per fixture and refer to the relevant diagram.
7. If fixture is new without ballast please refer to Fig.1.
8. If fixture ballast type is electronic please refer to Fig. 2.
9. If fixture ballast type is electronic and need rewiring please refer to Fig. 4.
10. If fixture ballast type is magnetic please refer to Fig. 3.
11. This device is powered by two pins; Install lamp into the wired lampholder end.
12. Visibly affix 'Modification Sticker' and reinstall housing cover and lens if applicable.
13. Select desired color temperature. (*Do not select when power on*).
14. Return power back to source and installation is now complete.

### WIRING DIAGRAM FOR TYPE B USE

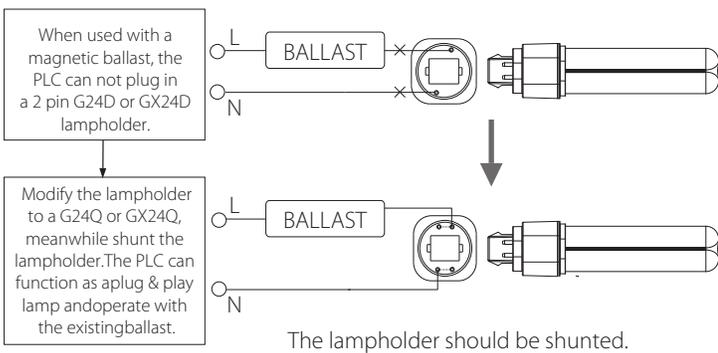
**Fig: 1** New fixture without ballast wiring



**Fig: 2** Electronic ballast fixture wiring



**Fig: 3** Magnetic ballast fixture wiring modification



**Fig: 4** Electronic ballast fixture re-wiring

