



# Quick Installation Guide

## Philips LED T8 System with Optifuse Technology

Please take the time to read this quick installation guide. The guide contains important information and notes regarding the installation and operation of Philips LED T8 System with Optifuse Technology.

### Instructions

- Philips LED T8 System with Optifuse Technology are suitable to replace either T8 fluorescent lamps in fixtures containing standard non-shunted G13 (medium bi-pin) sockets.

### Lamps Ordering, Electrical and Technical Data (Subject to change without notice)

Product Number	Ordering Code	Nom. Watts	Volts	Bulb Type	MOL (in.)	Initial Lumens <sup>1</sup>	Base	CRI	Color Temp. (K)	Pkg. Qty	Rated Avg. Life (Hrs.) <sup>2</sup>
42719-5	22T8/EXT/48-3500K UNV	22.5	100-277	T8	48"	2500	G13	85	3500K	10	50,000
42720-3	22T8/EXT/48-4000K UNV	22.5	100-277	T8	48"	2500	G13	85	4000K	10	50,000
42721-1	22T8/EXT/48-6500K UNV	22.5	100-277	T8	48"	2500	G13	85	6500K	10	50,000

### Driver Ordering, Electrical and Technical Data (Subject to change without notice)

No. of Lamps	Input Volts	Lamp Starting Method	Driver Family	Catalog Number	Input Power (W)	Line Current (Amps)		Min. Starting Temp (F/C)
						120V	277V	
1	120-277V (+/-10%)	Instant Start	Centium	ICN-2P24-TLED-SC	25W	0.20A	0.09A	0°F/-18°C
2	120-277V (+/-10%)	Instant Start	Centium	ICN-2P24-TLED-SC	48W	0.40A	0.17A	0°F/-18°C
3	120-277V (+/-10%)	Instant Start	Centium	ICN-4P24-TLED-SC	69W	0.61A	0.27A	0°F/-18°C
4	120-277V (+/-10%)	Instant Start	Centium	ICN-4P24-TLED-SC	93W	0.82A	0.36A	0°F/-18°C

During retrofit, rewiring is a MUST, please follow the installation steps on the back page.

1) Photometric testing consistent with IES LM-79.  
2) Tested to B50 L70 requirement.



## Retrofit Instructions

1. Remove diffuser (if applicable) and fluorescent lamp.
2. Open\Remove Wiring Compartment Cover.
3. Cut off all wires which connected to ballast.
4. Connect one wire from each lampholder together.
5. Connect one wire from the lampholder to branch circuit L (Live wire) and the other wire at the opposite end to the Branch Circuit N ( Neutral wire).
6. Close up wiring compartment.
7. Install LED T8 tube.
8. Switch on power.
9. Repeat steps 3 to 5 for each additional bulb\ballast based on illustration below.

## Luminaire Description

- Philips LED T8 tubes are suitable to be installed in T8 or T12 standard luminaires.
- Philips LED T8 tubes can't retrofit original luminaire which use remote Starter.
- Ensure all parts and accessories are in the package, included instruction, filed-applied label and tubular LED lamp, the additional wire connector and No. 18 AWG wiring maybe provided.
- Philips LED T8 tubes are intended to retrofit maximum four lamps, UL Listed surface mount, or type IC or non-IC recessed mount fluorescent luminaire with diffuser that use straight tubular lamps. These products intended to be used in dry or damp locations only.
- Please make sure the existing luminaire dimension is larger than dimension described in below table.

Philips LED T8 tube intended to retrofit Max. Number tubes in original luminaire	Luminaire Dimension with Max. No. of tubes Length X Width X Height (cm)
Max. 4pcs LED tubes(19G13T8_GA) can be operated in a luminaire with or without diffuser	120 x 60 x 8
Max. 4pcs LED tubes(10G13T8_GA) can be operated in a luminaire with or without diffuser	60 x 60 x 8

Figure A – Retrofit Luminaire with One Lamp and one ballast

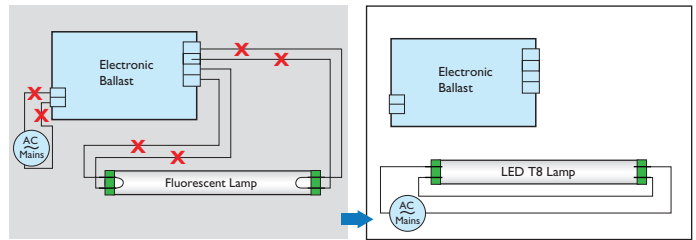


Figure B – Retrofit Luminaire with Two Lamps and one ballast

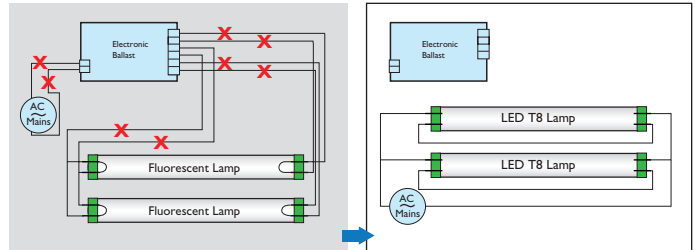


Figure C – Retrofit Luminaire with Three/Four Lamps and one ballast

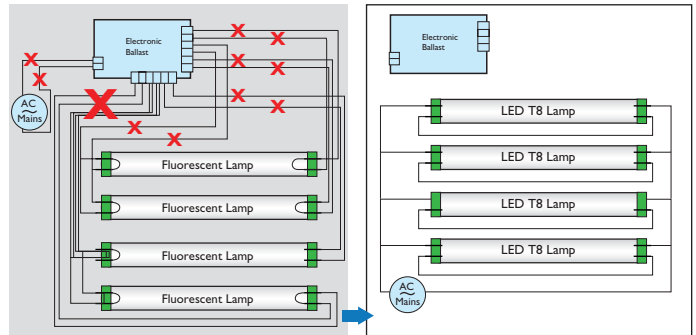
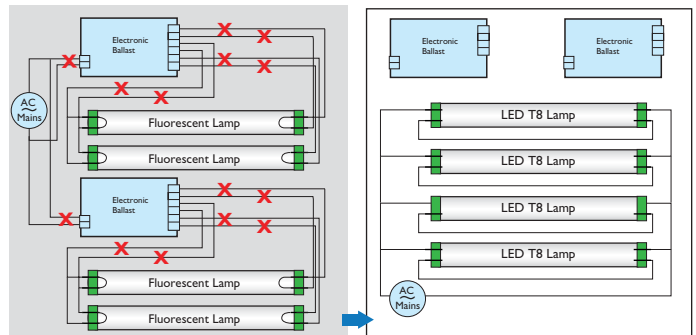


Figure D – Retrofit Luminaire with Three/Four Lamps and two ballasts



## Sockets



Non-Shunted

VS.



Shunted

**PHILIPS**

## WARNINGS, CAUTIONS AND OPERATING INSTRUCTIONS

**WARNING:** "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."

1. Risk of fire or electric shock. Not for direct replacement of fluorescent lamps. Use only with Philips ICN2P24TLEDSC35M / ICN4P24TLEDSC35M power supply.
2. Risk of fire or electric shock. Luminaires wiring, ballasts, or other electrical parts may be damaged when installing of reflector kit hardware. Check for enclosed wiring and components.
3. Risk of fire or electric shock. Reflector kit installation requires knowledge of fluorescent lighting luminaires electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
4. Risk of fire or electric shock. Install this kit only in the luminaires that has the construction features and dimensions shown in the photographs and/or drawings.
5. To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
6. Only those open holes indicated in the photographs and/or drawings may be made or altered as a result of kit installation. Do not leave any other open holes in an enclosure of wiring or electrical components.

**DANGER-RISK OF SHOCK-DISCONNECT POWER BEFORE INSTALLATION.**

**WARNING** - Risk of fire or electric shock. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and/or drawings.

**WARNING:** To avoid potential fire or shock hazard, do not use this retrofit kit in luminaires employing shunted bi-pin lampholders. Note: Shunted lamp holders are found only in fluorescent luminaires with Instant-Start ballasts. Instant-start ballasts can be identified by the words "Instant Start" or "I.S." marked on the ballast. This designation may be in the form of a statement pertaining to the ballast itself, or may be combined with the marking for the lamps with which the ballast is intended to be used, for example F40T12/IS. For more information, contact the LED luminaire retrofit kit manufacturer.

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.

**SUITABLE FOR DRY OR DAMP LOCATIONS.**

**DO NOT USE WITH DIMMERS**

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

**Lamps must be operated within an ambient fixture temperature of -22F (-30c) and 113F (45c) to ensure UL compliance.**



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