

# LED12T8/5CCT/3FT/HYBRID/SS

# **Specifications**



Model: LED12T8/5CCT/3FT/HYBRID/SS

Watts: 12

Volts: 120-277VAC 50/60Hz

Base Type: G13

Shape: T8

Avg. Kelvin: Selectable 3K/35K/4K/5K/65K

CRI: >80

Beam Spread: 200°

Avg. Initial Lumens: 1450 at 3K,1500 at at 35K-65K

Avg. Life Hours: 50,000

Length: 35.75" (908.1 mm)

Diameter: 1.09" (27.7 mm)

Ambient Operating Temp: -4°F to 113°F (-20°C to 45°C)

Location Rating: Suitable for dry or damp locations

Suitable for use in enclosed luminaires

Type A+B Hybrid

Direct replacement for 25W/36T8 (3FT) lamp only

Operates on electronic ballasts only, not for use with magnetic ballasts

Bypass operation is single-ended (label end) or double-ended

Safe Shield sleeve

Do not use with dimmers

This device is not intended for use with emergency exits or emergency lighting

NOTE: To prevent damage, the lamp must NOT be energized when when color (CCT) selector switch is changed







# 39241A / 39242A / 39243A

# T8 HYBRID TYPE A+B LED LAMP CCT SELECTABLE TYPE A PLUG & PLAY OR TYPE B DIRECT WIRE

Please keep this quick installation guide for future reference.

Modifications to the product will void the warranty.

Suitable to replace fluorescent lamps as specified on the product label.

The units covered by this report are intended to retrofit surface mount, Type IC or non-IC recessed mount listed fluorescent luminaires that use maximum four straight tubular lamps with or without a diffuser. The minimum lamp compartment dimensions are tabulated below:

Model	Input Ratings				Dimmable	Location	Minimum Lamp Compartment Dimensions	Lamp Quantity
	V	Hz	mA	W		Rating	[Length x Width x Height][inch]	
39241A	120-277	50/60	75	8	NO	DAMP	24.02 x 22.83 x 1.97	4
39242A	120-277	50/60	111	12	NO	DAMP	36.02 x 22.83 x 1.97	4
39243A	120-277	50/60	170	18	NO	DAMP	48.03 x 22.83 x 1.97	4

To prevent early lamp failure, the lamp should only be installed in operating environments ranging between:  $-4^{\circ}$ F and  $+113^{\circ}$ F ( $-20^{\circ}$ C and  $+45^{\circ}$ C).

This lamp only operates with a compatible electronic ballast as Type A, or with an input voltage of 120-277VAC as Type B.

TYPE A LAMP - Intended for direct replacement of a fluorescent lamp that operates from the original ballast without any modifications to the fluorescent luminaire.

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.

#### WARNING:

- a. Risk of fire or electric shock. When working with an electronic ballast please check the compatible list first! If you do not find your ballast on the list then please bypass the fixture, or please contact us!
- b. Risk of fire or electric shock. This LED retrofit kit installation requires knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
- c. 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 and where the input rating of the retrofit kit does not exceed the input rating of the luminaire.
- d. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- e. To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
- f. 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.
- g. 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.
- h. For a linear tubular LED lamp conversion, there shall be text or a diagram showing how the supply connections were made to the lampholders so the correct connections will be made to the lamp when the lamp is installed or replaced.
- i. This retrofit kit is accepted as a component of a luminaire where the suitability of the combination shall be determined by authorities having JURISDICTION.
- j. If the tube is installed as Type B, the luminaire, once modified as a retrofit fixture, will no longer operate fluorescent lamps. Not suitable for use with dimmers.
- k. Suitable for use in damp locations Not for use where directly exposed to water.
- I. Examine luminaire for damage before installing LED lamp. If lampholders or other parts are visibly damaged contact a qualified electrician. m. Do not mix fluorescent and LED lamps in the same luminaire unless ballast is marked for this purpose.
- n, CAUTION RISK OF ELECTRIC SHOCK. Do not use if outer lamp envelope is damaged or broken.
- o. 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.
- p. 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.
- q. Suitable for use in enclosed luminaires.

### **TYPE A-Instructions:**



# Type A-Installation Guide:



### Instructions

- 1. Switch off power to the luminaire.
- 2. Remove diffuser (if provided).
- 3. Remove the existing fluorescent lamps from the luminaire.
- 4. Select the color temperature by using the CCT switch on the LED lamp base.
  - Using the color (CCT) selector switch on the base, select the desired color temperature.
  - To prevent damage to lamp, lamp must not be energized when color (CCT) selector switch is changed.
- 5. Install the LED tube lamp.
- 6. Install diffuser (if removed in step 2).
- 7. Switch on power to the luminaire.
- 8. Before installation, please check the most current ballast compatibility list. If no match is found, please install the LED tubes according to the below Type-B installation instructions.

### **TYPE B-Instructions:**

1. Single-ended power input or Double-ended power input.

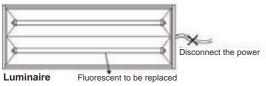


Note: The tube can only work with single-ended or double-ended power input.

## **Type B-Installation Guide:**

#### Instructions

#### 1. DISCONNECT POWER OF LUMINAIRE

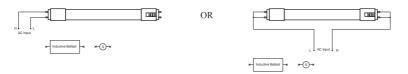


- a. Disconnect power to luminaire or circuit (if possible).
- b. Ensure all power is off by using a voltmeter or other method to confirm.
  - 3. RETROFIT LUMINAIRE
  - a. Retrofit luminaire with inductive ballast.
  - 1) Disconnect the wires between the starter and ballast according to the figure below.

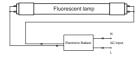


- 2. REMOVE EXISTING TUBE LAMP(S)
- a. Remove diffuser lens, if present.
- b. Remove existing fluorescent lamps by rotating one quarter turn and pulling the lamp(s) out.
- c. Remove ballast cover (Cover may be secured with screws or tabs).

2) Connect two wires to the branch circuit L and N according to the figure below.



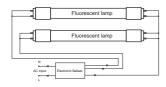
- b. Retrofit luminaire with an electronic ballast.
  - 1) Disconnect the wires between the tombstone and ballast according to the figure below.



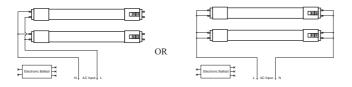
2) Connect two wires to the branch circuit L and N according to the figure below.



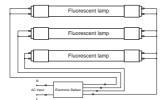
- c. Retrofit luminaire with two lamps and one electronic ballast.
- 1) Disconnect the wires between the tombstone and ballast according to the figure below.



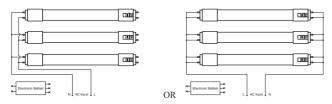
2) Connect two wires to the branch circuit L and N according to the figure below.



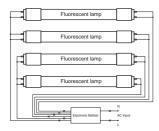
- d. Retrofit luminaire with three lamps and one electronic ballast.
  - 1) Disconnect the wires between the tombstone and ballast according to the figure below.



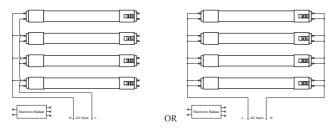
2) Connect two wires to the branch circuit L and N according to the figure below.



- e. Retrofit luminaire with four lamps and one electronic ballast.
  - 1) Disconnect the wires between the tombstone and ballast according to the figure below.



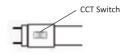
2) Connect two wires to the branch circuit L and N according to the figure below.



### 4. SELECT THE CCT

Select the color temperature by using the CCT switch on the LED lamp base.

- Using the color (CCT) selector switch on the base, select the desired color temperature.
- To prevent damage to lamp, lamp must not be energized when color (CCT) selector switch is changed.



#### 5. INSERT LED TUBES

- a. Read the label on the LED tube to ensure the power end of the tube is aligned with the power end of the socket(s). Next, insert the LED lamp in the normal way by sliding the pins into the socket and rotating a quarter turn until the LED tube locks in place.
- b. LED lamps are now fully installed.
- c. Replace diffuser lens, if present.
- d. After the modification is completed, attach the modified luminaire label to a visible place on the luminaire and keep it visible after installation.

#### 6. RESTORE THE POWER OF LUMINAIRE

Restore power to circuit/luminaire and test light. If necessary, adjust position of LED tube, and enjoy your new LED tube light!

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NOTE: This product complies with Part 18 of the FCC rules but may cause interference to radios, televisions, wireless telephones, and remote controls. If interference occurs, move the product away from these devices or plug it into a different outlet. Do not install this product near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30MHz.

NOTE: This equipment has been tested and found to comply with the limits for a Class A 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 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. This Class A digital apparatus complies with Canadian ICES-005.