LED T8 tube series-Hybrid



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T8-9-24GC-8XX-HYB T8-11-36GC-8XX-HYB T8-14-48GC-8XX-HYB



IMPORTANT

READ CAREFULLY BEFORE INSTALLING LED TUBE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.

RAB LED tubes 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.

WARNINGS

SUITABLE FOR DAMP LOCATIONS. DO NOT USE WITH STANDARD DIMMERS, SEE INSTRUCTIONS.

THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS. NOT FOR USE WITH LIGHT DIMMERS.

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.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND(2)THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

RISK OF SHOCK-DISCONNECT POWER BEFORE INSTALLATION.

RISK OF FIRE OR ELECTRIC SHOCK. LED RETROFIT KIT INSTALLATION REQUIRES KNOWLEDGE OF LUMINAIRES ELECTRICAL SYSTEMS. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION AND CONTACT A QUALIFIED ELECTRICIAN.
RISK OF FIRE OR ELECTRIC SHOCK. PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE OR YOUR LOCAL ELECTRICAL CODE. IF YOU ARE NOT FAMILIAR WITH THESE CODES AND REQUIREMENTS, CONTACT A QUALIFIED ELECTRICIAN.

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.

TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS. DO NOT MAKE OR ALTER ANY OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS DURING KIT INSTALLATION.

TO AVOID POTENTIAL FIRE OR SHOCK HAZARD, DO NOT USE THIS RETROFIT KIT IN LUMINAIRES EMPLOYING SHUNTED BI-PIN LAMPHOLDERS. NOTE: SHUNTED LAMPHOLDERS 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.

ONLY USE THE CONTROL PROVIDED WITH OR SPECIFIED BY THESE INSTRUCTIONS TO CONTROL THIS LAMP. THIS LAMP WILL NOT OPERATE PROPERLY WHEN CONNECTED TO A STANDARD (INCANDESCENT) DIMMER OR DIMMING CONTROL.

LED T8 tube series-Hybrid



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CAUTION - 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.

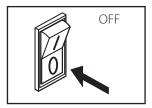
THIS LAMP ONLY OPERATES ON ELECTRONIC BALLASTS. IF LAMP DOES NOT LIGHT WHEN THE LUMINAIRE IS ENERGIZED, REMOVE LAMP FROM LUMINAIRE AND CONTACT LAMP MANUFACTURER OR QUALIFIED ELECTRICIAN.

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.

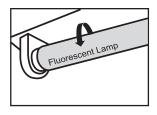
INSTALLATION INSTRUCTIONS - BALLAST COMPATIBLE

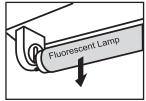
DO NOT INSTALL THIS LAMP IN A PRE-HEAT LUMINAIRE.

1. Turn Power OFF

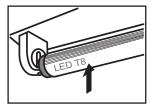


- 2. Remove lens or diffuser from the luminaire (if applicable)
- 3. Remove existing fluorescent lamps from the luminaire

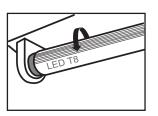




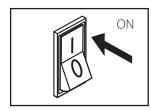
4. Bring LED lamp to the luminaire and insert lamp pins into luminaire lamp holders



5. Rotate LED lamp until lamp locks in place. Ensure that the LED lamp front points away from the back of the luminaire



- 6. Place lens or diffuser back in place (if applicable)
- 7. Switch power ON



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SINGLE-ENDED INSTALLATION - BALLAST BYPASS (Without dimmer)

- 1) Make sure the circuit breaker that supplies the power to the fixture is turned off.
- 2) Remove lens or diffuser cover(if applicable) and existing fluorescent lamps.
- 3) Open/Remove ballast wiring compartment cover.
- 4) Check if there is a ballast in the fixture, if not, please go to step 7.
- 5) Identify the line and neutral wires running from the breaker box to the ballast and confirm the power is off using a voltmeter.
- 6) Cut all wires connected to ballast, and remove ballast (and starter if present). Dispose of removed ballast and fluorescent lamps in accordance with government regulations in your area.
- 7) Identify what type of lampholders are in fixture (*Fig.1*), If exsiting lampholder is internally shunted, then replace with new non-shunted lampholder If lampholder is shunted with a jumper wire(*Fig.2*), remove wire to convert into non-shunted.
- 8) Wire using appropriate wiring diagram (Fig.3-4).
- 9) Reinstall the ballast cover to hide all wires.
- 10) Install your new LED T8 replacement lamp.
- 11) Apply Warning Label on a visible location inside the fixture.
- 12) Reinstall lens or diffusion cover on the light fixture.
- 13) Turn power on at the breaker box.
- 14) Turn on the lights.

SINGLE-ENDED INSTALLATION- BALLAST BYPASS (Without dimmer) (contd)

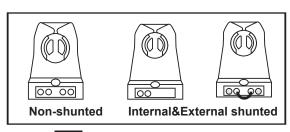


Fig:1 -Lampholder Type

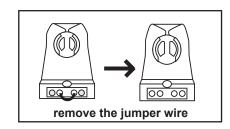


Fig:2 -External shunted Lampholder



Fig:3 - Single lamp wiring

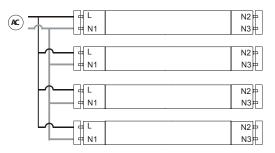


Fig:4 - Multiple lamps wiring

LED T8 tube series-Hybrid



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DOUBLE-ENDED INSTALLATION - BALLAST BYPASS (Without dimmer)

- 1) Make sure the circuit breaker that supplies the power to the fixture is turned off.
- 2) Remove lens or diffuser cover(if applicable) and existing fluorescent lamps.
- 3) Open/Remove ballast wiring compartment cover.
- 4) Check if there is a ballast in the fixture, if not, please go to step 7.
- 5) Identify the line and neutral wires running from the breaker box to the ballast and confirm the power is off using a voltmeter.
- 6) Cut all wires connected to ballast, and remove ballast (and starter if present). Dispose of removed ballast and fluorescent lamps in accordance with government regulations in your area.
- 7) Identify what type of lampholders are in fixture (*Fig.1*), Double ended wiring can be used with shunted or non-shunted lampholder.
- 8) Wire using appropriate wiring diagram (Fig.2-5).
- 9) Reinstall the ballast cover to hide all wires.
- 10) Install your new LED T8 replacement lamp.
- 11) Apply Warning Label on a visible location inside the fixture.
- 12) Reinstall lens or diffusion cover on the light fixture.
- 13) Turn power on at the breaker box.
- 14) Turn on the lights.

DOUBLE-ENDED INSTALLATION - BALLAST BYPASS (Without dimmer) (contd)

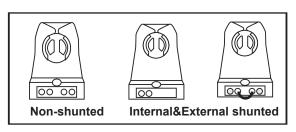


Fig:1 -Lampholder Type

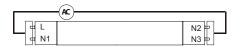


Fig:2 -Single-lamp with shunted lampholder

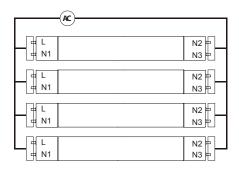


Fig:3 -Multiple-lamps with shunted lampholder



Fig:4 -Single-lamp with non-shunted lampholder

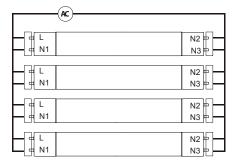


Fig:5-Multiple-lamps with non-shunted lampholder

LED T8 tube series-Single or Double-Ended Bypass



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DOUBLE-ENDED INSTALLATION (With dimmer)

DOUBLE-ENDED INSTALLATION (With dimmer) (cont'd)

- 1) Make sure the power supply is 120VAC/60HZ.
- 2) Make sure the circuit breaker that supplies the power to the fixture is turned off.
- 3) Remove lens or diffuser cover (if applicable) and existing fluorescent lamps.
- 4) Open/Remove ballast wiring compartment cover.
- 5) Check if there is a ballast in the fixture, if not, please go to step 7.
- 6) Identify the line and neutral wires running from the breaker box to the ballast and confirm the power is off using a voltmeter.
- 7) Cut all wires connected to ballast, and remove ballast (and starter if present). Dispose of removed ballast and fluorescent lamps in accordance with government regulations in your area.
- 8) Identify what type of lampholders are in fixture (*Fig.1*), Double ended wiring can be used with shunted or non-shunted lampholder.
- 9) Wire using appropriate wiring diagram (Fig.2-5).
- 10) Reinstall the ballast cover to hide all wires.
- 11) Install your new LED T5 replacement lamp.
- 12) Apply Warning Label on a visible location inside the fixture.
- 13) Reinstall lens or diffusion cover on the light fixture.
- 14) Turn power on at the breaker box.
- 15) Turn on the lights.

Luminaire overall dimensions, cm	Model Number	T8-9-24GC-8XX-HYB	T8-11-36GC-8XX-HYB	T8-14-48GC-8XX-HYB
	Pieces	4	4	4
	Length	61.5	91.5	121.5
	Width	60.5	60.5	60.5
	Height	10	10	10
Lamp-to-lamp Spacing, cm		11	11	11

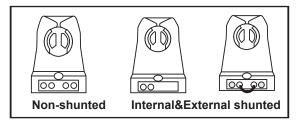


Fig:1 -Lampholder Type

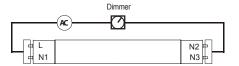


Fig:2 -Single-lamp with shunted lampholder

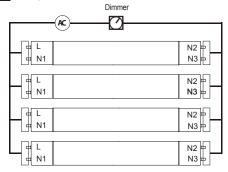


Fig:3 -Multiple-lamps with shunted lampholder

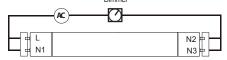


Fig:4-Single-lamp with non-shunted lampholder

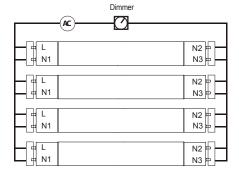


Fig:5 -Multiple-lamps with non-shunted lampholder



Easy Answers