



PRIOR TO INSTALLATION, PLEASE READ THE ENTIRE INSTALLATION INSTRUCTIONS

RISK OF FIRE OR ELECTRIC SHOCK PLEASE READ AND UNDERSTAND THE DETAILED INSTALLATION INSTRUCTIONS BEFORE INSTALLING THE LED T5 TUBE LIGHT.

IF THE TUBE IS INSTALLED AS TYPE B, THE LUMINAIRE ONCE MODIFIED AS A RETROFIT FIXTURE WILL NO LONGER OPERATE FLUORESCENT LAMPS.

LED T5 TUBE LIGHTS ARE DESIGNED TO WORK WITH ELECTRONIC BALLASTS OR AC DIRECT WIRE DOUBLE-END POWER INPUT.

MAINTENANCE NOTES

DO NOT USE WHERE DIRECTLY EXPOSED TO WATER OR WEATHER. NON-SUBMERGIBLE (NOT WATER TIGHT).

USE IN DRY OR DAMP LOCATIONS ONLY.

NOT SUITABLE FOR USE WITH DIMMER.

DISABLE ALL POWER TO THE FIXTURE BEFORE INSPECTION, INSTALLATION, OR REMOVAL. FAILURE TO DO SO WILL CREATE A HAZARDOUS AND FATAL WORKING ENVIRONMENT.

DO NOT OPEN – NO USER SERVICEABLE PARTS INSIDE.

WARNING

RISK OF FIRE OR ELECTRIC SHOCK WHEN WORK WITH ELECTRONIC BALLAST, PLEASE CHECK THE COMPATIBLE LIST FIRST. IF YOU DO NOT FIND YOUR BALLAST ON THE LIST, PLEASE BYPASS THE FIXTURE OR CONTACT US. DO NOT INSTALL THE LED TUBE WITH A BALLAST THAT IS NOT ON THE BALLAST COMPATIBLE LIST, RISK OF FIRE.

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.

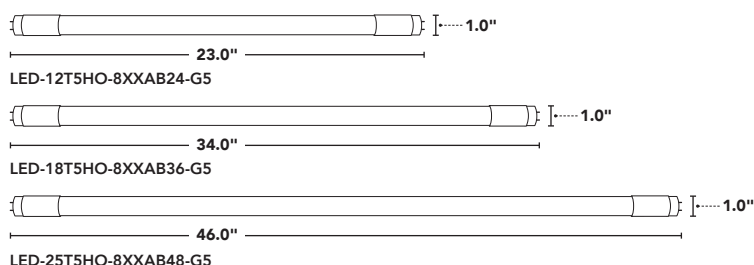
RISK OF FIRE OR ELECTRIC SHOCK INSTALL THIS KIT ONLY IN THE LUMINAIRES THAT HAVE THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN THE PHOTOGRAPHS AND/OR DRAWINGS, AND WHERE THE INPUT RATING OF THE RETROFIT KIT DOES NOT EXCEED THE INPUT RATING OF THE LUMINAIRE.

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 LAMP HOLDER TERMINALS TO MAKE NEW CONNECTIONS AT TERMINALS. INSTEAD INSTALLERS SHOULD CUT EXISTING LAMP HOLDER LEADS AWAY FROM THE LAMP HOLDER AND MAKE NEW ELECTRICAL CONNECTIONS TO LAMP HOLDER LEAD WIRES BY EMPLOYING APPLICABLE CONNECTORS.

FOR A LINEAR TUBULAR LED LAMP CONVERSION, THERE SHALL BE TEXT OR A DIAGRAM SHOWING HOW THE SUPPLY CONNECTIONS WERE MADE TO THE LAMP HOLDERS SO THE CORRECT CONNECTIONS WILL BE MADE TO THE LAMP WHEN THE LAMP IS INSTALLED OR REPLACED.

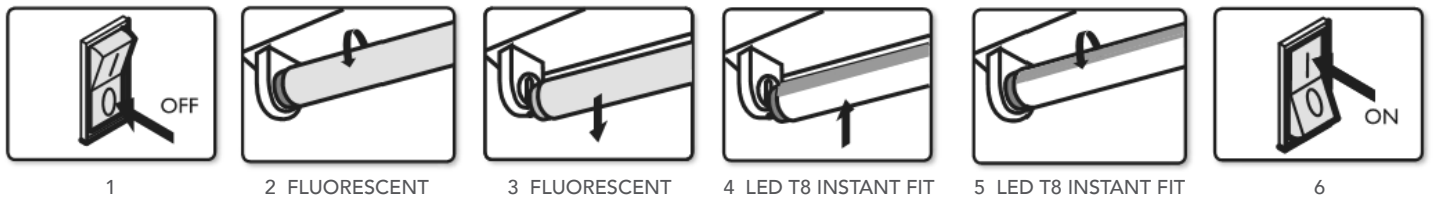




INSTALLATION — TYPE A

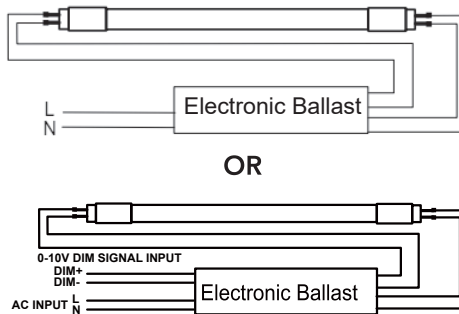
1. SWITCH-OFF POWER TO THE LUMINAIRE
2. REMOVE DIFFUSER (IF PROVIDED)
3. REMOVE THE EXISTING FLUORESCENT LAMPS FROM THE LUMINAIRE
4. INSTALL THE LED TUBE LAMP
5. INSTALL DIFFUSER (IF REMOVED IN STEP 2)
6. SWITCH ON POWER TO THE LUMINAIRE

NOTE: BEFORE INSTALLATION, CHECK SPECIFICATIONS FOR THE MOST CURRENT BALLAST COMPATIBILITY LIST. IF NOT COMPATIBLE, INSERT LED TUBES ACCORDING TO TYPE B INSTALLATION INSTRUCTIONS.



WIRING DIAGRAM

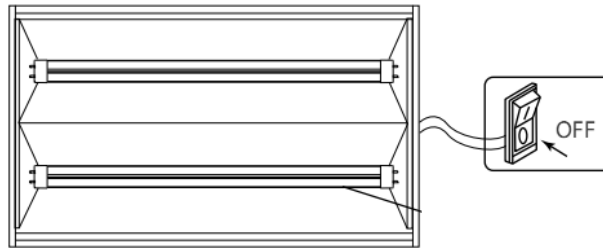
DOUBLE-ENDED POWER INPUT



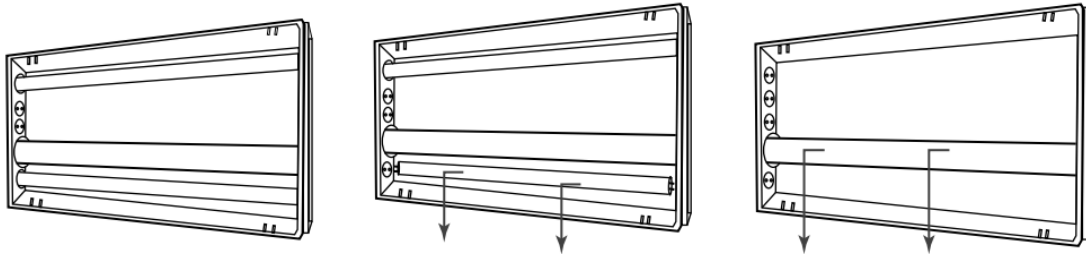


INSTALLATION — TYPE B

1. DISCONNECT POWER TO LUMINAIRE OR CIRCUIT (IF POSSIBLE). ENSURE ALL POWER IS OFF BY USING A VOLTMETER OR OTHER APPROVED METHOD.

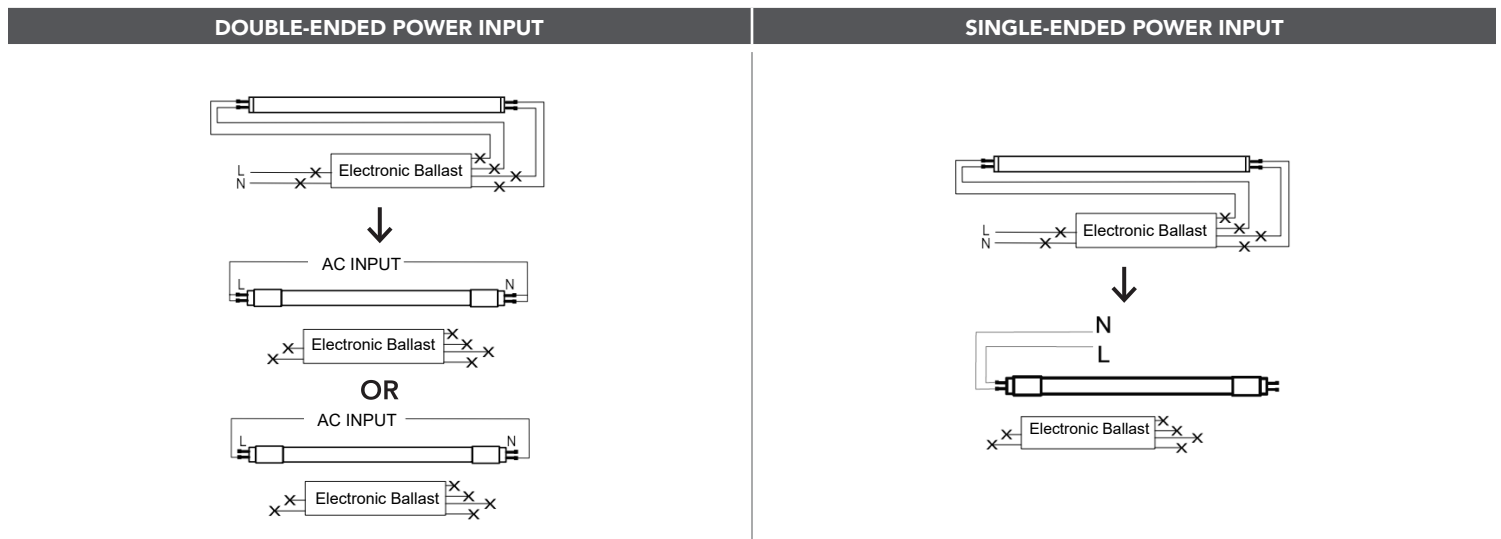


2. REMOVE EXISTING TUBE LAMP(S). REMOVE TROFFER LENS (IF PRESENT). REMOVE EXISTING FLUORESCENT TUBE BY ROTATING ONE-QUARTER TURN AND SLIDING LAMP(S). REMOVE BALLAST COVER (MAY BE SECURED WITH SCREWS OR TABS).



3. DISCONNECT THE WIRES BETWEEN BALLAST ACCORDING TO THE FIGURE BELOW.

WIRING DIAGRAM



4. INSERT LED TUBES. ENSURE BOTH ENDS OF THE LED TUBE ARE ALIGNED WITH SOCKET, THEN INSERT LED LAMP IN THE NORMAL WAY BY SLIDING PINS INTO SOCKETS AND ROTATING A QUARTER TURN UNTIL THE LED TUBE LOCKS IN PLACE. LED LAMPS ARE NOW FULLY INSTALLED. REPLACE TROFFER LENS (IF PRESENT). AFTER MODIFICATION COMPLETED. ATTACH THE REPLACEMENT MARKING AND CAUTIONARY LABEL TO A VISIBLE PLACE ON THE LUMINAIRE AND KEEP IT VISIBLE AFTER INSTALLATION.

5. RESTORE POWER TO CIRCUIT/LUMINAIRE AND TEST LIGHT. IF NECESSARY, ADJUST POSITION OF LED TUBE.



120-277VAC BALLAST COMPATIBILITY LIST

BRAND	MODEL	START TYPE	MAX LOADING QTY	1 LAMP		2 LAMPS		3 LAMPS		4 LAMPS	
				120VAC	277VAC	120VAC	277VAC	120VAC	277VAC	120VAC	277VAC
ACCUSTART	B454PUNVHB-E	PROGRAMMED RAPID	4	Y	Y	Y	Y	Y	Y	Y	Y
	B254PUNV-D	PROGRAMMED	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
ACT	ACT2S54PSUNV	INSTANT	2	N	N	Y	Y	N/A	N/A	N/A	N/A
ARCATA	ACT4M54PSUNV		4	Y	Y	Y	Y	Y	Y	Y	Y
ESPEN	VE254MVHRP 11101	PROGRAMMED	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
	VE454MVHRP 11088		4	Y	Y	Y	Y	Y	Y	Y	Y
FULHAM	RACEHORSE RHA-UNV-454-LT5		4	Y	Y	Y	Y	Y	Y	Y	Y
	RACEHORSE RHA-UNV-254-LT5		2	N	N	Y	Y	N/A	N/A	N/A	N/A
	WORKHORSE WH5-277-L	INSTANT	2	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A
	WH33-120-L		2	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A
HI HOWARD INDUSTRIES	EP2/54HO/PRS/MV/W/MC	PROGRAMMED RAPID	2	N	N	Y	Y	N/A	N/A	N/A	N/A
	EP4/54HO/PRS/MV/L		4	Y	Y	Y	Y	Y	Y	Y	Y
KEYSTONE	KTEB-254HO-UV-PS-SL	PROGRAMMED	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
LEVITON	SD2J5-28M	DIMMING	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
OSRAM	QHE 2X54T5HO/UNV PSN HT	PROGRAMMED RAPID	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
	QHE 4X54T5HO/UNV PSN HT SCL		4	Y	Y	Y	Y	Y	Y	Y	Y
PHILIPS ADVANCE	ICN-2S54-90C-T	PROGRAMMED	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
	ICN-4S54-90C-2LS-G		4	Y	Y	Y	Y	Y	Y	Y	Y
	ICN-2S54-90C-N	INSTANT	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
PLUSRITE	BAF454PS/MV	PROGRAMMED	4	Y	Y	Y	Y	Y	Y	Y	Y
TRIDONIC	PC 2X80 T5 PRO Ip	INSTANT	2	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A
IOTA	I-160 NOS	EMERGENCY	CHARGING/ EMERGENCY	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A

347VAC BALLAST COMPATIBILITY LIST

BRAND	MODEL	START TYPE	MAX LOADING QTY	1 LAMP	2 LAMPS	3 LAMPS	4 LAMPS
				347VAC	347VAC	347VAC	347VAC
ADVANCE	HCN-4S54-90C-2LS-G	PROGRAMMED	4	Y	Y	Y	Y
GE	GE454PS347/480-E	PROGRAMMED	4	N	Y	Y	Y
GE CURRENT	GE254PS347/480-F	PROGRAMMED	2	N	Y	N/A	N/A
PHILIPS ADVANCE	HCN-2S54-90C-WL	INSTANT	2	Y	Y	N/A	N/A
SYLVANIA	QTP 2X54T5HO/347-480 PSN HT	PROGRAMMED	2	Y	Y	N/A	N/A