

LED 4FT Glass Tube (Type A+B: Hybrid)



Application: Commercial; Retail; school/institution; government agency; grocery store....



Specification

Model No.	TCL-T8-F210-15W-A+B4000K	TCL-T8-F210-15W-A+B5000K
Power:	15W	
Input Voltage:	AC100-277V	
Luminous Flux:	1950 LM	
Power Factor:	>0.9	
THD:	<10%	
CCT:	4000K	5000K
Cover:	Glass with Frosted Film	
DLC Family ID	PSYFXBRV	P3SHPGHN
CRI:	>80	
Working Life:	>50,000 hours	
Working Temperature:	4°F to 105°F	

GENERAL DESCRIPTION

The T8 LED Hybrid Tube is shatter resistant, energy efficient and easy for installation replacement for Fluorescent Tubes. Compatible with or without a ballast, this linear tube is thoughtfully designed to be long-lasting and maintenance free.

FEATURES

- Glass with Outer Film: Prevent the glass break into pieces
- High energy efficiency: save more than 60% energy versus fluorescent lamps
- Hybrid: Can be used with or without ballast and reduces maintenance expenses
- Licensed Under Patent No. 8,729,809
- NOTE: Check the ballast compatibility list before installation

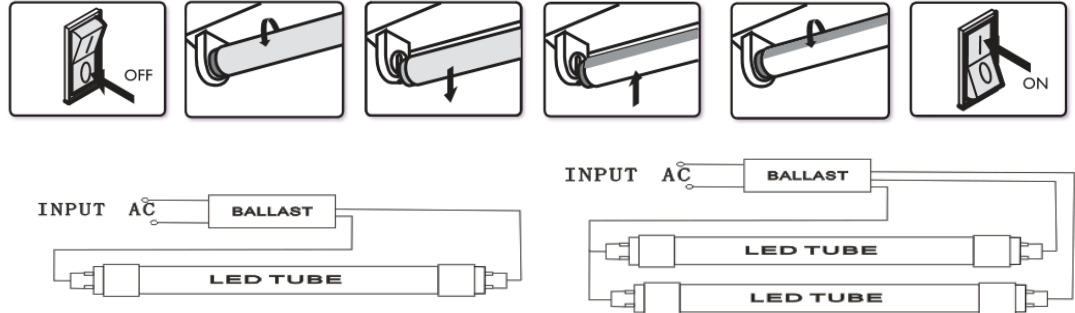
Ordering Guide

Model No: TCL-T8 -F120-15W-A+B (XXXX)K						
Company Code	Size	Material	Length	Watt	Wiring	CCT
TCL	T8: T8 Tube	F: Glass with Frosted Film	120: 1.2M/48"	15W	A+B: Hybrid with or without ballast	4000K 5000K

LED 4FT Glass Tube (Type A+B: Hybrid) Installation Guide

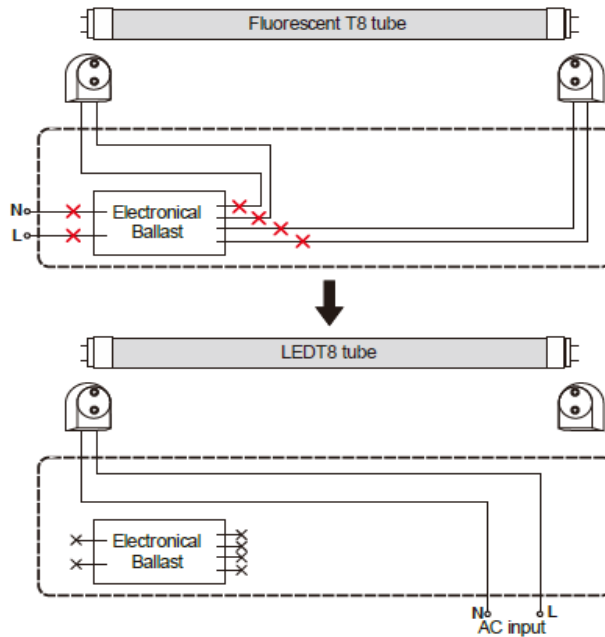
• Type A (Working with Ballast) Installation - Check Ballast Compatibility List before installation)

1. Disconnect power
2. Remove diffuser (Optional)
3. Removing the existing fluorescent lamp
4. Install the LED Tube Lamp
5. Install diffuser back (if removed in step 2)
6. Turn on power



• Type B (Working without Ballast, single end) Installation - Must Use a Non-Shunted Socket

1. Disconnect power
2. Remove diffuser (Optional)
3. Removing the existing fluorescent lamp
4. Cut the existing ballast
5. Change the existing socket to Non-Shunted Socket.
6. Wire the power to the new Non-Shunted Socket.
7. Install the LED Tube Lamp, make sure the LED lamp end with label is installed on the socket with power. The tube will not work if installed reverse.
8. Install diffuser back (if removed in step 2)
9. Turn on power



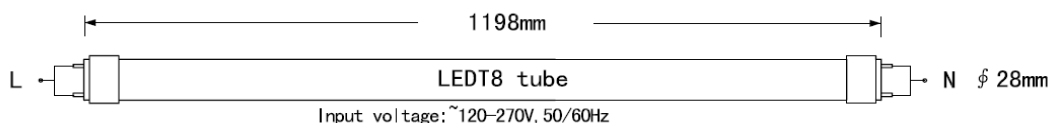
Disconnect the wires between starter and ballast according to the left figure.

Connect two wires to branch circuit L and N according to the left figure.

• Type B (Working without Ballast, double end) Installation

(Please contact manufacturer or your sales rep to make sure if your lamp is working while installed double end)

1. Disconnect power
2. Remove diffuser (Optional)
3. Removing the existing fluorescent lamp
4. Remove the existing ballast
5. Change the existing socket to Shunted Socket. (Optional: Need only if the existing socket is wired ballast bypass with a non-shunted socket)
6. Wire the power to the new Shunted Socket (Optional: if changed in step 5)
7. Install the LED Tube Lamp. The tube will still be working if installed reverse.
8. Install diffuser back (if removed in step 2)
9. Turn on power








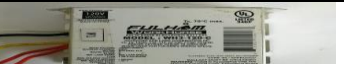
























Note: the tube will not be damaged if installed in reverse.

TYPE A+B ELECTRONIC BALLAST COMPATIBILITY LIST

VERSION: G

UPDATED DATE: 2017/07/04

TYPE A+B
THE COMPATIBILITY LIST OF BELOW WAS ALL VERIFIED WITH TYPE A+B










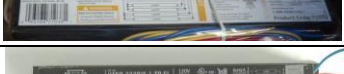








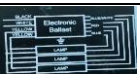

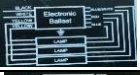


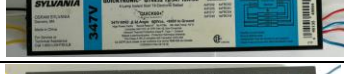



















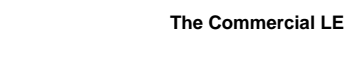
NUMBER	BRAND	MODEL	OUTPUT	STARTING TYPE	WIRING DIAGRAM	PIC OF REFERENCE
1	ACCUPRO	AP-RC-232IP-120-1	2-LAMP	INSTANT START		
2		AP-RC-432IP-120	4-LAMP	INSTANT START		
3	FULHAM CO., INC	WH3-120-L	2-LAMP	INSTANT START		
4		WH3-120-C	2-LAMP	INSTANT START		
2		WHCG3-120-T8-IS	4-LAMP	INSTANT START		
5	GENERAL ELECTRIC	GE-132-MAX-L/ultra	1-LAMP	INSTANT START		
6		GE232-120RESDIYB	2-LAMP	INSTANT START		
7		GE-232-MV-N-42T	2-LAMP	INSTANT START		
3		GE232MAX-N/Ultra	2-LAMP	INSTANT START		
8		GE232MV-N-DIY	2-LAMP	INSTANT START		
9		GE232MAX-H/ultra	2-LAMP	INSTANT START		
10		GE232MAXP-H/ultra	2-LAMP	INSTANT START		
3		GE232-120RES-DIY	2-LAMP	INSTANT START		
11		GE-232-MVPS-H	2-LAMP	PROGRAMMED START		
12		GE232MAX-L/ULTRA	2-LAMP	INSTANT START		
13		GE232-120-RES	2-LAMP	INSTANT START		
3		GE332MV-N-DIY	3-LAMP	INSTANT START		
14		GE332MAX-G-N	3-LAMP	INSTANT START		
15		GE332MAX-G-N-DIYB	3-LAMP	INSTANT START		
16		GE432MAX-G-N	3-LAMP	INSTANT START		
3		GE432-MVPS-N	4-LAMP	INSTANT START		
17		GE432MAX-H/ULTRA	4-LAMP	INSTANT START		

TYPE A+B ELECTRONIC BALLAST COMPATIBILITY LIST

VERSION: G

UPDATED DATE: 2017/07/04

TYPE A+B
THE COMPATIBILITY LIST OF BELOW WAS ALL VERIFIED WITH TYPE A+B

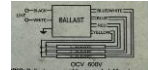



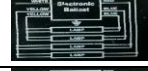





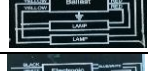
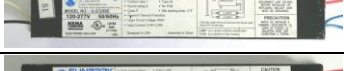
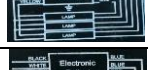









NUMBER	BRAND	MODEL	OUTPUT	STARTING TYPE	WIRING DIAGRAM	PIC OF REFERENCE
18	GENERAL ELECTRIC	GE432MAX-H-42T	4-LAMP	INSTANT START		
19		GE432MAX-N/ULTRA	4-LAMP	INSTANT START		
4		GE-432-MV-N-42T	4-LAMP	INSTANT START		
20		GE432-120RES-DIY	4-LAMP	INSTANT START		
21		GE432-120RES-DIYB	4-LAMP	INSTANT START		
22	KEYSTONE	KTEB-232RIS-1-TP-SL	2-LAMP	INSTANT START		
5		KTEB-432-UV-IS-N-P	4-LAMP	INSTANT START		
23	OSRAM SYLVANIA	QHE 1x32T8/347 ISN-SC	1-LAMP	INSTANT START		
24		QHE 2x32T8/UNV ISN-SC	2-LAMP	INSTANT START		
25		QHE 2x32T8/UNV PSN-MC	2-LAMP	PROGRAMMED START		
6		QHE 3x32T8/UNV ISL-SC	3-LAMP	INSTANT START		
26		QHE 3x32T8/UNV ISN-SC-1	3-LAMP	INSTANT START		
27		QT4x32T8/347 ISN-SC	4-LAMP	INSTANT START		
28		QHE 4x32T8/UNV ISN-SC	4-LAMP	INSTANT START		
6		QHE 4x32T8/UNV ISL-SC	4-LAMP	INSTANT START		
29	PHILIPS ADVANCE	ICN-1P32-N	1-LAMP	INSTANT START		
30		IOPA-2P32-LW-N	2-LAMP	INSTANT START		
31		REB-2P32-SC	2-LAMP	INSTANT START		
7		ICN-2P32-N	2-LAMP	INSTANT START		
32		GOPA-2P32-SC	2-LAMP	INSTANT START		
33		ICN-2P32-SC	2-LAMP	INSTANT START		
34		ICN-3P32-N	3-LAMP	INSTANT START		

TYPE A+B ELECTRONIC BALLAST COMPATIBILITY LIST

VERSION: G

UPDATED DATE: 2017/07/04

TYPE A+B
THE COMPATIBILITY LIST OF BELOW WAS ALL VERIFIED WITH TYPE A+B

NUMBER	BRAND	MODEL	OUTPUT	STARTING TYPE	WIRING DIAGRAM	PIC OF REFERENCE
8	PHILIPS ADVANCE	IOP-3PSP32-SC	3-LAMP	PROGRAMMED START		
35		IOP-3P32-N	3-LAMP	INSTANT START		
36		ICN-4P32-SC	4-LAMP	INSTANT START		
37		IOPA-4P32-N	4-LAMP	INSTANT START		
8		IOP-4P32-N	4-LAMP	INSTANT START		
38	SUNPARK	U-2/32ISE	2-LAMP	INSTANT START		
39		U-3/32ISE	3-LAMP	INSTANT START		
40	UNIVERSAL	B232IUNVHP-B	2-LAMP	INSTANT START		
10		B332IUNVHP-A	3-LAMP	INSTANT START		
41		B432IUNVHP-A	4-LAMP	INSTANT START		
42		B432IUNVHE-A	4-LAMP	INSTANT START		

Note:

1. The ballasts model list on the chart have been tested and approved by manufacturer;
2. For TYPE A+B mode Tube, when using type B mode connection, please make sure the VOLTAGE under AC110-277V, working temperature 4° F to 105° F
3. Absence of a ballast from this chart does not imply incompatibility. Please reference the ballast manufacturer's instructions for installation and further information.
4. This list is to be used as a general guideline, the LED tube may not work if the ballast is over 5 years old or have a weak starting voltage.
5. Please strictly follow the wiring diagram shown on the ballasts;
6. Please check if the contact points of the old fixture work normal;
7. Please use caution and test lamps in fixtures for an extended period of time to ensure proper operation;
8. Do not proceed with a mass installation until proper operation of the LED tube is verified.
9. We will continuously testing new model ballasts in lab, please contact manufacturer to get latest compatibility list;