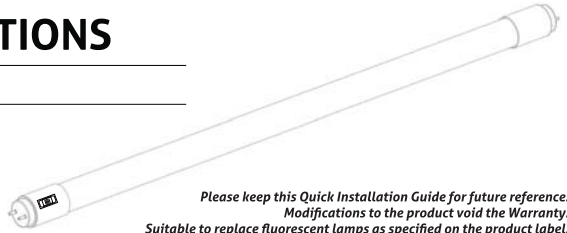




INSTALLATION INSTRUCTIONS

T8 LED TUBE TYPE A+B



*Please keep this Quick Installation Guide for future reference.
Modifications to the product void the Warranty.
Suitable to replace fluorescent lamps as specified on the product label.*

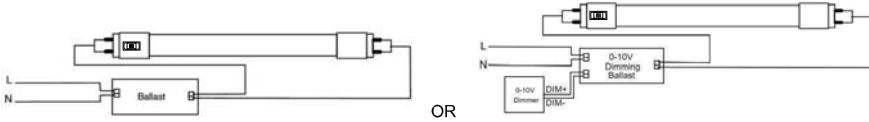


WARNING & CAUTION:

- a. RISK OF FIRE OR ELECTRIC SHOCK WHEN WORKING WITH ELECTRONIC BALLAST PLEASE CHECK THE COMPATIBILITY LIST FIRST. IF THE BALLAST CAN'T BE FOUND IN THE LIST PLEASE BYPASS THE BALLAST OR CONTACT WITH THE MANUFACTURER. DO NOT INSTALL THE TUBE IF THE BALLAST IS NOT ON THE LIST.
- b. 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.
- c. DO NOT INSTALL THIS LAMP IN A PRE-HEAT LUMINAIRE.
- d. 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.
- e. THIS DEVICE IS NOT INTENDED FOR USE WITH EMERGENCY EXITS.
- f. Warning - 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.
- g. 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 and where the input rating of the retrofit kit does not exceed the input rating of the luminaire.
- h. Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- i. Warning - to prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects
- j. Warning for single-ended power input: To avoid potential fire or shock hazard, do not use this retrofit kit 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.
- k. 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. THE RETROFIT KIT IS ACCEPTED AS A COMPONENT OF ALUMINAIRE 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.
- m. 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. If the tube is installed as type B, the luminaire, once modified as retrofit fixture, will no longer operate fluorescent lamps.

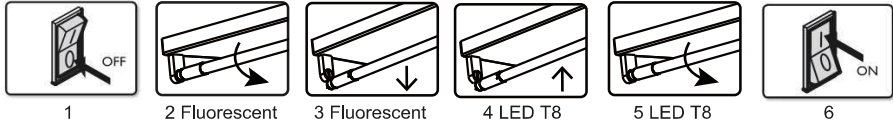
TYPE A -Assembly Introduction

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.



Input Voltage: Base on the ballast

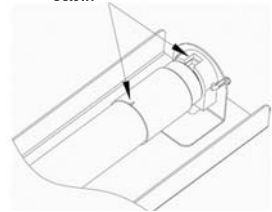
Type A-Installation Guide:



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.
7. Before installation, please check specifications for the most current ballast compatibility list, if no match, please insert led tubes according to below type B installation instructions.

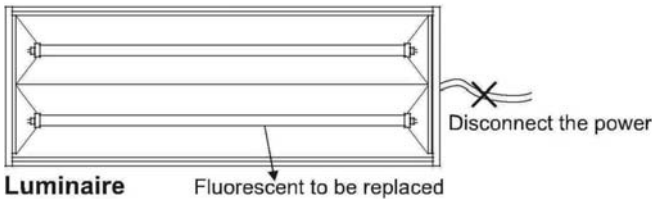


Risk of fire. please notice that tube must be well installed. Mark on end caps showing proper alignment with sockets. Please make sure mark is matched with socket as below:



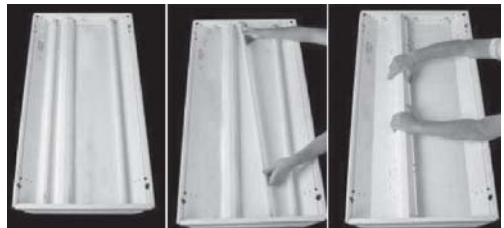
TYPE B -Assembly Introduction

Type B-Installation Guide:



Disconnect power to luminaire or circuit (if possible). Ensure all power is off by using a voltmeter or other method to confirm.

1. DISCONNECT POWER OF LUMINAIRE
2. REMOVE EXISTING TUBE LAMP(S)
 - a. remove troffer lens, if present .
 - b. remove existing fluorescent by rotating one quarter turn and sliding lamp(2)
 - c. remove ballast cover. (cover may be secured with screws or tabs)



a) Troffer and Lamps

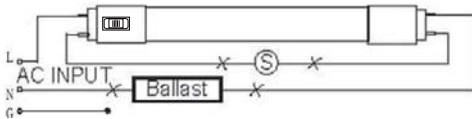
b) Remove tube lamps

c) Remove ballast cover (lens removed)

3. RETROFIT LUMINAIRE

Retrofit luminaire with ballast

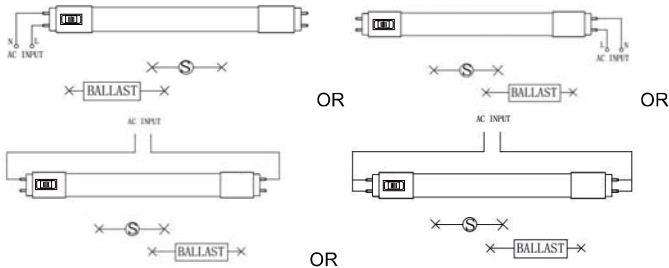
1) Disconnect the wires between starter and ballast according to the below figure.



If no starter is present, simply disconnect the wires before and after the ballast

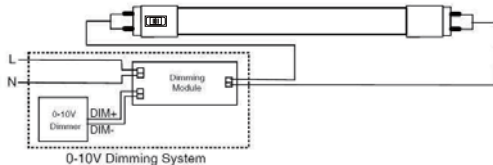
2) Connect two wires to branch circuit L and N according to the below figure.

Case 1: Direct AC wiring diagram without dimming



Input Voltage: AC120-277V 50/60Hz

Case 2: Direct AC wiring diagram with 0-10V dimming system



Input Voltage: AC120-277V 50/60Hz



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.

4. INSERT LED TUBES

- Read label on the LED tube to ensure the power end of LED is aligned with powered tube socket, then insert LED lamp in the normal way by sliding pins into sockets and rotating a quarter turn until LED tube locks in place.
- LED lamps are now fully installed.
- Replace troffer lens, if present.
- After the modification is complete, attach the Replacement Marking and cautionary Label to a visible place on the luminaire and keep it visible after installation.

5. 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!

When working with electronic ballast please check the compatibility list first!
 If you couldn't find your ballast on the list then bypass the fixture, or contact us please!
 Do not install the LED tube with the ballast which is not on the ballast compatibility list, risk of firing!

Y: Compatible
 N: Incompatible
 N/A: Not tested

Ballast Compatible List T8 4FT 18W A+B D76 120V & 277V

No.	Ballast Brand	Model No.	Start Type	Max Loading QTY	Compatible (Y/N/N/A)								
					1 LAMP		2 LAMPS		3 LAMPS		4 LAMPS		
					120VAC	277VAC	120VAC	277VAC	120VAC	277VAC	120VAC	277VAC	
1	STANDARD	61113 - E232T8IS120/N/AS	Instant Start	2	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A
2	STANDARD	61123 - E232T8IS120/L/AS	Instant Start	2	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A
3	STANDARD	61124 - E232T8IS120/N/AS/BULK	Instant Start	2	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A
4	STANDARD	61126 - E232T8IS120/L/AS/BULK	Instant Start	2	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A
5	STANDARD	60075 - E232T8IS120/H/90C	Instant Start	2	N	N/A	N	N/A	N/A	N/A	N/A	N/A	N/A
6	STANDARD	61131 - E232T8IS120-277/L/AS	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
7	STANDARD	61128 - E232T8IS120-277/N/AS	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
8	STANDARD	61062 - E232T8PS120-277/L/AS/BULK	Instant Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
9	STANDARD	60080 - E332T8IS120/L/BULK	Instant Start	3	Y	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A
10	STANDARD	61114 - E432T8IS120/N/AS	Instant Start	4	N	N/A	Y	N/A	Y	N/A	Y	N/A	N/A
11	STANDARD	61122 - E332T8IS120/N/AS	Instant Start	3	Y	N/A	Y	N/A	Y	N/A	N/A	N/A	N/A
12	STANDARD	61120 - E432T8IS120/L/AS	Instant Start	4	Y	N/A	Y	N/A	Y	N/A	Y	N/A	N/A
13	STANDARD	61125 - E432T8IS120/N/AS/BULK	Instant Start	4	N	N/A	Y	N/A	Y	N/A	Y	N/A	N/A
14	STANDARD	61127 - E432T8IS120/L/AS/BULK	Instant Start	4	Y	N/A	Y	N/A	Y	N/A	Y	N/A	N/A
15	STANDARD	61134 - E432T8IS120-277/L/AS	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
16	STANDARD	61063 - E432T8PS120-277/N/AS/BULK	Program Start	4	Y	N	Y	Y	Y	Y	Y	Y	Y
17	STANDARD	61065 - E432T8PS120-277/L/AS/BULK	Program Start	4	Y	N	Y	Y	Y	Y	Y	Y	Y
18	STANDARD	61129-E432T8IS120-277/N/AS	Instant Start	4	N	N	Y	Y	Y	Y	Y	Y	Y
19	STANDARD	62587-E432T8IS120-277/N/AS/BULK	Instant Start	4	N	N	Y	Y	Y	Y	Y	Y	Y
20	PHILIPS ADVANCE	I2T-132-SC	Dimmable Programmed Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A
21	PHILIPS ADVANCE	IOPA-1P32-LW-N	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A
22	PHILIPS ADVANCE	ICN-1P32-N	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A
23	PHILIPS ADVANCE	IOP-2P32-HL-N	Instant Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
24	PHILIPS ADVANCE	I2T-2S32-SC	Dimmable Programmed Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
25	PHILIPS ADVANCE	ICN-2P32-N	Instant Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
26	PHILIPS ADVANCE	IOP-2P32-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
27	PHILIPS ADVANCE	IOP-2PSP32-LW-N	Programmed Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
28	PHILIPS ADVANCE	IOPA-2P32-LW-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
29	PHILIPS ADVANCE	REL-2P32-SC	Instant Start	2	Y	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A
30	PHILIPS ADVANCE	REZ-2S32-SC	Instant Start	2	N	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A
31	PHILIPS ADVANCE	I2T-2PSP32-SC	Dimmable Programmed Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
32	PHILIPS ADVANCE	IOP-2P32-LW-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
33	PHILIPS ADVANCE	IOP-2PSP32-N	Programmed Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
34	PHILIPS ADVANCE	IOPA-2P32-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
35	PHILIPS ADVANCE	ICN-2P32-SC	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
36	PHILIPS ADVANCE	RCN-2S32-SC	Program Rapid	2	N	N/A	Y	N/A	N/A	N/A	N/A	N/A	N/A
37	PHILIPS ADVANCE	VEZ-2S32-SC	Dimmable Programmed Start	2	N/A	N	N/A	Y	N/A	N/A	N/A	N/A	N/A
38	PHILIPS ADVANCE	I2T-3PSP32-SC	Dimmable Programmed Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
39	PHILIPS ADVANCE	IOPA-3P32-N	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
40	PHILIPS ADVANCE	ICN-3P32-N	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
41	PHILIPS ADVANCE	IOPA-3P32-LW-SC	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
42	PHILIPS ADVANCE	REZ-3S32-SC	Dimmable Programmed Start	3	N	N/A	N	N/A	Y	N/A	N/A	N/A	N/A
43	PHILIPS ADVANCE	IOP-4P32-LW-SC	Programmed Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
44	PHILIPS ADVANCE	ICN-4P32-N	Instant Start	4	N	N	Y	Y	Y	Y	Y	Y	Y
45	PHILIPS ADVANCE	IOP-4P32-LW-N	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
46	PHILIPS ADVANCE	I2T-4S32	Dimmable Programmed Start	4	N	N	N	N	Y	Y	Y	Y	Y
47	PHILIPS ADVANCE	VEL-4P32-SC	Instant Start	4	N/A	Y	N/A	Y	N/A	Y	N/A	Y	N/A
48	PHILIPS ADVANCE	ICN-4P32-SC	Instant Start	4	N	N	N	N	N	N	N	N	Y
49	PHILIPS ADVANCE	IOPA-4P32-N	Instant Start	4	N	N	Y	Y	Y	Y	Y	Y	Y
50	PHILIPS ADVANCE	IOP-4PSP32-SC	Programmed Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
51	PHILIPS ADVANCE	IOPA-4P32-LW-N	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
52	KEYSTONE	KTEB-232-LV-IS-NI-P	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
53	KEYSTONE	KTEB-332-LV-IS-NI-P	Instant Start	2	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
54	KEYSTONE	KTEB-432RIS-1-TP-SL	Instant Start	4	Y	N/A	Y	N/A	Y	N/A	Y	N/A	N/A
55	KEYSTONE	KTEB-432-LV-IS-NI-P	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
56	OSRAM	QHE 2X32T8/UNV PSX-MC	Program Rapid	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
57	OSRAM	QHE 2X32T8/UNV ISH HT-SC	Instant Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
58	OSRAM	QHE 2X32T8/UNV ISL-SC1	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
59	OSRAM	QHE 2X32T8/UNV ISL-SC	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
60	OSRAM	QTP 2X32T8/UNV ISN-SC	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
61	OSRAM	QHE 2X32T8/UNV ISN-SC	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A

Ballast Compatible List T8 4FT 18W A+B D76 120V & 277V

No.	Ballast Brand	Model No.	Start Type	Max Loading QTY	Compatible (Y/N/N/A)							
					1 LAMP		2 LAMPS		3 LAMPS		4 LAMPS	
					120VAC	277VAC	120VAC	277VAC	120VAC	277VAC	120VAC	277VAC
62	OSRAM	QHE 2X32T8/UVN DIM-TC	Dimming Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A
63	OSRAM	QHE 2X32T8/UVN PSN-MC	Program Rapid	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
64	OSRAM	QHE 3X32T8/UVN ISL-SC	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
65	OSRAM	QHE 3X32T8/UVN ISH HT-SC	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
66	OSRAM	QTP 3X32T8/UVN ISN-SC	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
67	OSRAM	QHES 2X32T8/UVN PSN-SC	StepN/A Switching Programmed R	2	Y	Y	N	N	N/A	N/A	N/A	N/A
68	OSRAM	QHE 3X32T8/UVN PSN-SC	Programmed Rapid Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
69	OSRAM	QHE 3X32T8/UVN ISL-SC	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
70	OSRAM	QTP 4X32T8/UVN ISL-SC	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
71	OSRAM	QHE 4X32T8/UVN ISL-SC	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
72	OSRAM	QTP 4X32T8/UVN ISN-SC	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
73	OSRAM	QHE 2X32T8/UVN ISN-SC	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
74	Triad	B432IUNVHP-A	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
75	Triad	B232IUNVHP-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
76	Triad	B332IUNVHP-A	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
77	Triad	B432IUNVHE-A	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
78	Triad	B432PUNVHE-A	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
79	Triad	B332IUNVEL-A	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
80	Triad	B232IUNVEL-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
81	Triad	B232IUNVHEH-A	Instant Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A
82	Triad	B332IUNVHE-A	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
83	Triad	B232PUNVHE-B	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
84	HI HOWARD INDUSTRIES	EPL3/32IS/MV/SCHE	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
85	HI HOWARD INDUSTRIES	EPH4/32IS/MV/SC	Instant Start	4	N	N	N	N	N	N	Y	Y
86	HI HOWARD INDUSTRIES	EPL2/32IS/MV/MC/HE	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
87	HI HOWARD INDUSTRIES	EP2/32IS/MV/MC/HE	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
88	HI HOWARD INDUSTRIES	EP4/32IS/MV/MC/HE	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
89	HI HOWARD INDUSTRIES	EPL4/32IS/MV/MC/HE	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
90	GE	GE132MAX-H/Ultra	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A
91	GE	GE132MAXP-L/ULTRA	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A
92	GE	GE-132-MV-PS-L	Programmed Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A
93	GE	GE-132-MV-N	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A
94	GE	GE132MAXP-H/ULTRA	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A
95	GE	GE132-MVPS-H	Programmed Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A
96	GE	GE132MAX-G-N	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A
97	GE	GE232MAXP-H/ULTRA	Instant Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A
98	GE	GE232-MV-PS-H	Instant Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A
99	GE	GE232MAX-L/ULTRA	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
100	GE	GE232-MVPS-L	Programmed Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
101	GE	GE232-MVPS-N	Programmed Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
102	GE	GE232MAX-G-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
103	GE	GE-232-MVPS-XL	Programmed Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
104	GE	GE232MAX-G-N-DIYB	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
105	GE	GE-232-MV-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
106	GE	GE-232-MV-PS-H	Programmed Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A
107	GE	GE232MAXG-N-DIYL	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
108	GE	GE232MAXP-L/ULTRA	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
109	GE	GE-232-MV-PS-N	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A
110	GE	GE332MAXP-H-42T	Instant Start	3	N	N	N	N	N	Y	N/A	N/A
111	GE	GE-332-MVPS-XL	Program Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
112	GE	GE332MAX-G-N	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
113	GE	GE332-MVPS-L	Programmed Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
114	GE	GE332MAXP-L/ULTRA	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
115	GE	GE332MAX-G-H	Instant Start	3	N	N	N	N	Y	Y	N/A	N/A
116	GE	GE332MAX-G-N-DIYB	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
117	GE	GE332MV-N-DIY	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
118	GE	GE432MAXP-H/ULTRA	Instant Start	4	N	N	N	N	Y	Y	Y	Y
119	GE	GE432MAXG-N-DIYL	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
120	GE	GE432MAX-L/ULtra	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
121	GE	GE432MAX90-V60	Instant Start	4	N	N	N	N	N	N	Y	Y
122	GE	GE432MAXPH/ULTRA	Instant Start	4	N	N	N	N	Y	Y	Y	Y
123	GE	GE432MAXP-L/ULTRA	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y
124	ESPEL	VE332MVHIPLE	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A
125	ESPEL	VE2P32MVHPE 11080	Programmed Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A

Ballast Compatible List T8 4FT 18W A+B D76 120V & 277V

No.	Ballast Brand	Model No.	Start Type	Max Loading QTY	Compatible (Y/N/N/A)								
					1 LAMP		2 LAMPS		3 LAMPS		4 LAMPS		
					120VAC	277VAC	120VAC	277VAC	120VAC	277VAC	120VAC	277VAC	
126	ESPEN	VE4P32MVHIPE 11072	Instant Start	4	N	N	Y	Y	Y	Y	Y	Y	Y
127	ESPEN	VE4P32MVHPPE 11086	Programmed Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
128	ESPEN	VE3P32MVHIPL 11056	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
129	ESPEN	VE4P32MVHIPL 11057	Instant Start	4	Y	Y	N	Y	Y	Y	Y	Y	Y
130	ESPEN	VE4P32MVHIPE 11073	Instant Start	4	N	N	N	N	N	N	Y	Y	Y
131	ESPEN	VE232MVHIPL 11068	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
132	ESPEN	VE3P32MVHPPE 11083	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
133	ESPEN	VE2P32MVHIPE 11069	Instant Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
134	ESPEN	VE2P32MVHIPE 11068	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
135	Halco	EP332IS/L/MV/HE	Instant Start	3	Y	Y	Y	Y	Y	Y	Y	N/A	N/A
136	Halco	EP432IS/L/MV/HE	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
137	Halco	EP232IS/MV/HE	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
138	Halco	EP332IS/MV/HE	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
139	Robertson	ISL432T8HEMV 3P20160	Instant Start	4	Y	Y	N	Y	N	Y	N	Y	Y
140	TCP	E3P32ISUNVE	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
141	TCP	E4P32ISUNVE	Instant Start	4	Y	N	N	N	N	Y	Y	Y	Y
142	TCP	E4P32ISUNHE	Instant Start	4	N	N	N	N	N	N	Y	Y	Y
143	SYLVANIA	QTP 1X32T8/UNV DIM-TC	Dimming Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A
144	SYLVANIA	QHE 1X32T8/UNV ISL-SC	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A
145	SYLVANIA	QHE 1X32T8/UNV ISN-SC	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A
146	SYLVANIA	QHE 1X32T8/UNV ISH HT SC	Instant Start	1	Y	Y	N/A	N/A	N/A	N/A	N/A	N/A	N/A
147	SYLVANIA	QTP 2X32T8/UNV DIM-TC	Dimming Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
148	SYLVANIA	QHE 2X32T8/UNV ISH-SC	Instant start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
149	SYLVANIA	QTP 2X32T8 UNV ISN SC	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
150	SYLVANIA	QTP 2X32T8/UNV PSX-TC	Programmed Rapid Start	2	N	N	Y	Y	N/A	N/A	N/A	N/A	N/A
151	SYLVANIA	QTP 3X32T8/UNV PSX-SC	Programmed Rapid Start	3	N	N	N	N	Y	Y	N/A	N/A	N/A
152	SYLVANIA	QHE 4X32T8/UNV ISL-SC	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
153	SYLVANIA	QHE 4X32T8/UNV ISN-SC	Instant Start	4	Y	N	N	N	Y	Y	Y	Y	Y
154	SYLVANIA	QHE 4X32T8/UNV PSX-SC	Programmed Rapid Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
155	arcata	ACT4P32ISUNVE	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
156	ACT	ACT3P32ISUNVE	Instant Start	3	Y	Y	Y	Y	Y	Y	N/A	N/A	N/A
157	EIKO	PM-3X32T8-UNV-IS-H	Instant Start	3	N	N	N	N	N	Y	N/A	N/A	N/A
158	EIKO	PM-3X32T8-UNV-IS	Instant Start	3	Y	Y	N	Y	N	Y	N/A	N/A	N/A
159	EIKO	PM-2X32T8-UNV-IS	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
160	OSRAM	QHE 3X32T8/UNV DIM-TCL	Programmed Rapid Start	3	N	N	N	N	Y	Y	N/A	N/A	N/A
161	OSRAM	QHE 4X32T8/UNV DIM-TCL	Programmed Rapid Start	4	N	N	N	N	N	N	Y	Y	Y
162	PHILIPS ADVANCE	YZT-4532-G	Programmed Start	4	N/A	N	N/A	N	N/A	Y	N/A	Y	Y
163	SYLVANIA	QTP 3X32T8/UNV DIM-TCL	Programmed Rapid Start	3	N	N	N	N	Y	Y	N/A	N/A	N/A
164	Plusrite	BAF432IS/MV	Instant Start	4	Y	Y	Y	Y	Y	Y	Y	Y	Y
165	Plusrite	BAF232PS/MV	program Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
166	Sunlite	40155-SU5B/232/MV	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
167	Triad	R232IUAV-C	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
168	EIKO	PM-4X32T8-UNV-IS	Instant Start	4	N	Y	N	Y	N	Y	N	Y	Y
169	GE	GE232MAX-N/ULTRA	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
170	GE	GE232MVPS-N-VO3	program Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A
171	ROBERTSON	ISS232T8MVV	Instant Start	2	Y	Y	Y	Y	N/A	N/A	N/A	N/A	N/A

Ballast Compatible List T8 4FT 18W A+B D76 347V

No.	Ballast Brand	Model No.	Start Type	Max Loading QTY	Compatible (Y/N/N/A)			
					1 LAMP	2 LAMP	3 LAMP	4 LAMP
					347VAC	347VAC	347VAC	347VAC
1	STANDARD	56557 - E132T8IS347/L/BULK	Instant Start	1	N	N/A	N/A	N/A
2	STANDARD	59741 - E232T8PS347/H/XTRM	Program Start	2	Y	Y	N/A	N/A
3	STANDARD	62992 - E232T8PS347/N/AS/BULK	Program Start	2	Y	Y	N/A	N/A
4	STANDARD	66150 - E232T8IS/MIC/347/N/AS	Instant Start	2	Y	Y	N/A	N/A
5	STANDARD	66151 - E232T8IS/MIC/347/N/AS/BULK	Instant Start	2	Y	Y	N/A	N/A
6	STANDARD	66152 - E232T8IS/MIC/347/L/AS/BULK	Instant Start	2	Y	Y	N/A	N/A
7	STANDARD	60076 - E232T8IS347/H/90C	Instant Start	2	N	N	N/A	N/A
8	STANDARD	60079 - E332T8IS347/L/90C/BULK	Instant Start	3	Y	Y	Y	N/A
9	STANDARD	56603 - E432T8IS347/L/BULK	Instant Start	4	Y	Y	Y	Y
10	STANDARD	61066 - E432T8PS347/L/AS/BULK	Program Start	4	N	Y	Y	Y
11	STANDARD	10294 - E432T8IS347/N	Instant Start	4	N	Y	Y	Y
12	STANDARD	59771 - E432T8IS347/H/90C	Instant Start	4	N	N	N	N
13	GE	GE232MAX347-H	Instant Start	2	N	Y	N/A	N/A
14	GE	GE332MAXP347-H	Instant Start	3	N	N	Y	N/A
15	GE	GE432MAXP347-H	Instant Start	4	N	N	N	Y
16	GE	GE432MAXP347-N	Instant Start	4	N	Y	Y	Y
17	SYLVANIA	QHE 2X32T8/347 ISL-SC	Instant Start	2	Y	Y	N/A	N/A
18	SYLVANIA	QTP 2X32T8/347 ISN-SC	Instant Start	2	Y	Y	N/A	N/A
19	arcata	ACT2P32IS347	Instant start	2	Y	Y	N/A	N/A
20	arcata	ACT4P32IS347	Instant start	4	N	Y	Y	Y
21	arcata	ACT2P32IS347L	Instant start	2	Y	Y	N/A	N/A
22	arcata	ACT4P32IS347L	Instant start	4	Y	Y	Y	Y