

# EMERGENCY SPECIALIST



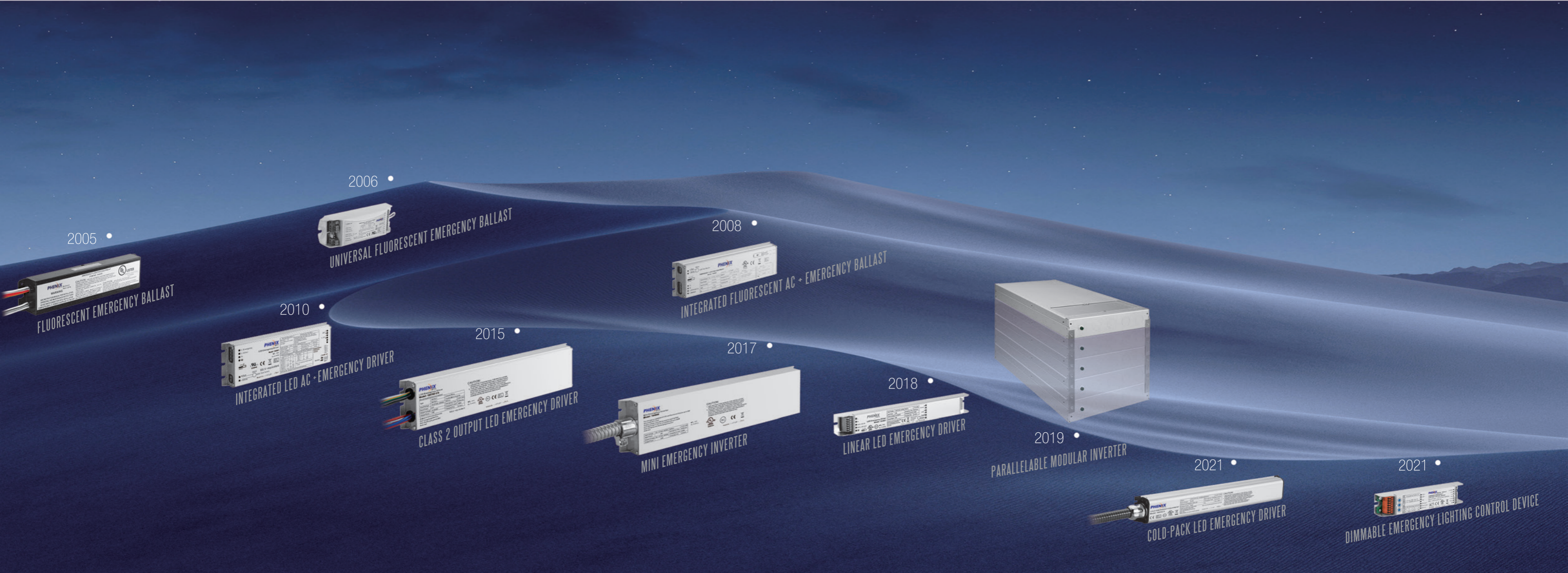
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2005 •

PHENIX  
FLUORESCENT EMERGENCY BALLAST

2006 •

PHENIX  
UNIVERSAL FLUORESCENT EMERGENCY BALLAST

2008 •

PHENIX  
INTEGRATED FLUORESCENT AC + EMERGENCY BALLAST

2010 •

PHENIX  
INTEGRATED LED AC - EMERGENCY DRIVER

2015 •

PHENIX  
CLASS 2 OUTPUT LED EMERGENCY DRIVER

2017 •

PHENIX  
MINI EMERGENCY INVERTER

2018 •

PHENIX  
LINEAR LED EMERGENCY DRIVER

2019 •

PHENIX  
PARALLELABLE MODULAR INVERTER

2021 •

PHENIX  
COLD-PACK LED EMERGENCY DRIVER

2021 •

PHENIX  
DIMMABLE EMERGENCY LIGHTING CONTROL DEVICE

# MILESTONES



SLIM SIZE

POWERFUL

RELIABLE

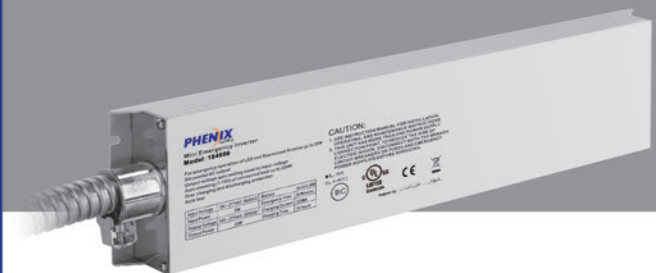
DURABLE

MINI EMERGENCY INVERTER

DIMMABLE EMERGENCY LIGHTING CONTROL DEVICE

COLD-PACK LED EMERGENCY DRIVER

LED EMERGENCY DRIVER



# PHENIX EMERGENCY MODULE SELECTION GUIDE

Phenix emergency module	Operating temperature	Input voltage	Output voltage	Auto test	AC driver/ ballast function	AC driver/ballast output power	Emergency power	Lumens @120 LM/W	Approval			
									UL LISTED	RA US	BC	CE
<b>LED emergency driver</b>		07-14										
184301-X	-40-50°C	AC 120-277V	DC 10-300V	•		Max.1500W @5A	9W	1080	•		•	•
184302-X	-40-50°C	AC 120-277V	DC 20-300V	•		Max.1500W @5A	18W	2160	•		•	•
184303-X	-40-50°C	AC 120-277V	DC 30-400V	•		Max.2000W @5A	27W	3240	•		•	•
184500-8C1.0	0-50°C	AC 120-277V	DC 18-60V	•	•	2.7-25W selectable	3.5W	420		•	•	•
184500-8C2.0	0-50°C	AC 120-277V	DC 18-60V	•	•	2.7-25W selectable	7W	840		•	•	•
184500-8C4.0	0-50°C	AC 120-277V	DC 18-60V	•	•	2.7-25W selectable	14W	1680		•	•	•
184500-8C5.0	0-50°C	AC 120-277V	DC 18-60V	•	•	2.7-25W selectable	17W	2040		•	•	•
184501-8C1.0	0-50°C	AC 120-277V	DC 18-60V	•	•	10.8-42W selectable	3.5W	420		•	•	•
184501-8C2.0	0-50°C	AC 120-277V	DC 18-60V	•	•	10.8-42W selectable	7W	840		•	•	•
184501-8C4.0	0-50°C	AC 120-277V	DC 18-60V	•	•	10.8-42W selectable	14W	1680		•	•	•
184501-8C5.0	0-50°C	AC 120-277V	DC 18-60V	•	•	10.8-42W selectable	17W	2040		•	•	•
184700-1	0-50°C	AC 120-277V	DC 10-60V	•		Max.300W @5A	5W	600		•	•	•
184701-1	0-50°C	AC 120-277V	DC 11-60V	•		Max.300W @5A	9W	1080		•	•	•
184702-1	0-50°C	AC 120-277V	DC 15-60V	•		Max.300W @5A	15W	1800		•	•	•
184703-1	0-50°C	AC 120-277V	DC 25-60V	•		Max.300W @5A	25W	3000		•	•	•
184700-2/3	0-50°C	AC 120-277V	DC 10-60V	•		Max.300W @5A	5W	600	•		•	•
184701-2/3	0-50°C	AC 120-277V	DC 11-60V	•		Max.300W @5A	9W	1080	•		•	•
184702-2/3	0-50°C	AC 120-277V	DC 15-60V	•		Max.300W @5A	15W	1800	•		•	•
184703-2/3	0-50°C	AC 120-277V	DC 25-60V	•		Max.300W @5A	25W	3000	•		•	•
184900-X	0-50°C	AC 120-277V	DC 5-200V	•		Max.600W @3A	4.5W	540	•		•	•
184901-X	0-50°C	AC 120-277V	DC 10-300V	•		Max.900W @3A	9W	1080	•		•	•
184902-X	0-50°C	AC 120-277V	DC 15-300V	•		Max.900W @3A	13.5W	1620	•		•	•
184903-X	0-50°C	AC 120-277V	DC 20-300V	•		Max.900W @3A	18W	2160	•		•	•
<b>Fluorescent emergency ballast</b>		15-17										
184000	0-50°C	AC 120-277V				17W,18W,32W,36W	3W	300	•			
184010-1	0-50°C	AC 120-277V				17W,18W,32W,36W	3W	300		•		•
184011	0-50°C	AC 120-277V				17W,18W,32W,36W	6W	600		•		•
184009	0-50°C	AC 120-277V			•	17W,18W,32W,36W	3W	300		•		•
<b>Emergency inverter</b>		18-19										
184600	0-50°C	AC 120-277V	AC 120-277V Auto setting	•		Max.360W with 0-10V	36W	4320	•		•	
184601	0-50°C	AC 120-277V	AC 120-277V Auto setting	•		Max.1000W with 0-10V	100W	12000	•		•	
184602	0-50°C	AC 120-277V	AC 120-277V Auto setting	•		Max.2000W with 0-10V	200W	24000	•		•	
184804	0-50°C	AC 120-277V	AC 120-277V Auto setting	•		Max.4000W with 0-10V	400W	48000	•		•	
<b>Emergency lighting control device</b>		20										
18010-X	-20-65°C	AC 120-277V	AC 120-277V	•		Max.1385W with 0-10V	10 - 600W @120V 10 - 1000W @277V	1200-120000	•			•



# COLD-PACK LED EMERGENCY DRIVER

18430X-X

## • FEATURES

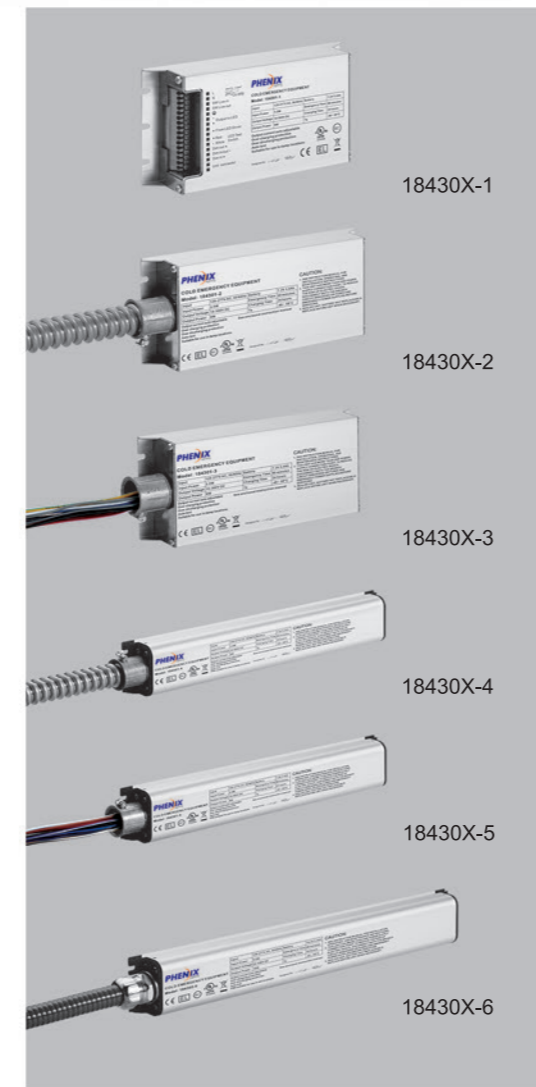
1. Emergency operation of LED light source and luminaires in extreme temperature from -40°C to +50°C (-40°F to +122°F)
2. Perfectly compatible with both DC LED loads and AC LED drivers
3. Constant emergency power output, wide range of output voltage from 20 to 400VDC, output current auto adjustable
4. Various emergency power options:

18430X	Emergency power
184301	9W
184302	18W
184303	27W

5. Various structures options:

Type	Description
18430X-1	Square version with terminal block
18430X-2	Square version with metal conduits
18430X-3	Square version with metal conduit's head
18430X-4	Linear version with metal conduits
18430X-5	Linear version with metal conduit's head
18430X-6	Linear version with metal conduits, IP66

6. Auto dimming (0-10V) of connected load up to 90W for 184301, 180W for 184302 and 270W for 184303
7. Auto test
8. Slim aluminum housing, built-in Battery
9. 18430X-1/2/3/4/5: Suitable for indoor, dry and damp applications
10. 18430X-6: IP66 rating. Suitable for outdoor and wet applications



## • CHARACTERISTICS

Type	184301-X	184302-X	184303-X
Rated voltage	120-277VAC 50/60Hz		
Rated current	0.06A	0.1A	0.12A
Rated power	3.5W	5.5W	7.5W
Heating power	8W	10W	12W
Emergency power	9W	18W	27W
Output voltage	10-300V	20-300V	30-400V
Output current of AC driver	5A (Max.)		
Operation frequency	320kHz≥f≥50kHz		
Power factor	0.5		
Battery	Li-ion		
Charging time	24 Hours		
Discharge time	>90 Minutes		
Charging current	0.17A		
Life time	5 Years		
Charging cycles	>1000		
Operation temperature	-40-50°C (-40° F- 122° F)		
Efficiency	80%		
Abnormal protection	Over load, inrush current limiting, over temperature, open circuit, short circuit protection with auto-reset		
Wire	0.75-1.5mm <sup>2</sup>		
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, FCC Part 15, ICES-005		
Safety standard	EN 61347-1, EN 61347-2-7, UL924, CSA C.22.2 No. 141		
Meas. mm [inch]	184301-4/5/6: L330 [12.99] x W50 [1.97] x H30 [1.18] Mounting center: 320 [12.60]		
	184302-4/5/6: L395 [15.55] x W50 [1.97] x H30 [1.18] Mounting center: 385 [15.16]		
	184303-4/5/6: L460 [18.11] x W50 [1.97] x H30 [1.18] Mounting center: 450 [17.72]		
	184301-1: L165 [6.50] x W82 [3.23] x H30 [1.18] Mounting center: 157 [6.18]		
	184302-1: L205 [8.07] x W82 [3.23] x H30 [1.18] Mounting center: 197 [7.76]		
	184303-1: L245 [9.65] x W82 [3.23] x H30 [1.18] Mounting center: 237 [9.33]		
Meas. mm [inch]	184301-2/3: L205 [8.07] x W82 [3.23] x H30 [1.18] Mounting center: 197 [7.76]		
	184302-2/3: L245 [9.65] x W82 [3.23] x H30 [1.18] Mounting center: 237 [9.33]		
	184303-2/3: L285 [11.22] x W 82 [3.23] x H30 [1.18] Mounting center: 277 [10.91]		



# INTEGRATED LED AC + EMERGENCY DRIVER

18450X

## • FEATURES

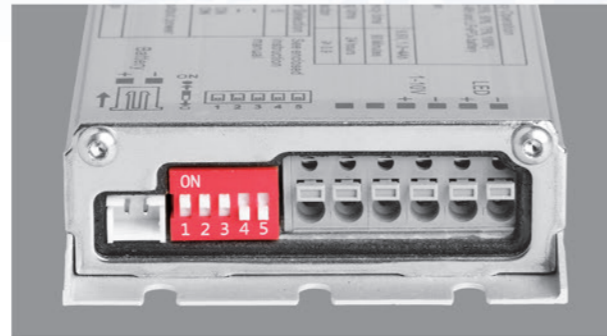


184500



184501

1. For normal and emergency operation of LEDs, no need an extra LED driver
2. AC driver function in normal mode: constant current and multi-current selectable output, 0-10V dimmable
3. Four emergency output powers electable
4. Auto Test
5. Slim aluminium housing
6. Suitable for indoor, dry and damp applications



Dipswitch **1/2/3**: Setting LED working current in normal mode  
Dipswitch **4/5**: Setting emergency output

Driver output current selection				
Dipswitch			SEC	
1	2	3	184500	184501
-	-	-	150mA (18-60V)	600mA (18-60V)
ON	-	-	250mA (18-60V)	700mA (18-60V)
-	ON	-	300mA (18-60V)	750mA (18-56V)
-	-	ON	350mA (18-60V)	800mA (18-52V)
ON	ON	-	400mA (18-60V)	850mA (18-49V)
ON	-	ON	450mA (18-55V)	900mA (18-46V)
-	ON	ON	500mA (18-50V)	950mA (18-44V)
ON	ON	ON	600mA (18-42V)	1000mA (18-42V)

Emergency output selection			
Dipswitch		Power	Battery
4	5		
-	-	25% (3.5W)	9.6V/1Ah
ON	-	50% (7W)	9.6V/2Ah
-	ON	75% (14W)	9.6V/4Ah
ON	ON	100% (17W)	9.6V/5Ah

Max. emergency output power 17W

## • CHARACTERISTICS

Type	184500/184501			
Model	18450X-A1-8C1.0	18450X-A1-8C2.0	18450X-A1-8C4.0	18450X-A1-8C5.0
Rated voltage	120-277VAC 50/60Hz			
Rated current	184500: 0.3A		184501: 0.5A	
Rated power	184500: 36W		184501: 59W	
Emergency output power	25% (3.5W)	50% (7W)	75% (14W)	100% (17W)
Output voltage	18-60VDC			
Operation frequency	320kHz≥f≥50kHz			
Power factor	0.9			
Battery	Ni-Cd/Ni-MH/LiFePO4/Li-ion			
Charging time	24 Hours			
Discharge time	>90 Minutes			
Charging current	0.05-0.25A			
Life time	5 Years			
Charging cycles	>500			
Operation temperature	0-50°C (32°F-122°F)			
Output current	184500: 150mA, 250mA, 300mA, 350mA, 400mA, 450mA, 500mA, 600mA ±5%			
	184501: 600mA, 700mA, 750mA, 800mA, 850mA, 900mA, 950mA, 1000mA ±5%			
Efficiency	75%			
Abnormal protection	Over load, Inrush current limiting, open circuit, short-circuit Protection with auto-reset			
Wire	0.75-1.5mm <sup>2</sup>			
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, FCC part15, ICES-005			
Safety standard	EN 61347-1, EN 61347-2-13, EN 61347-2-7, UL924, CSA C.22.2 NO.141			
Meas. Module mm [inch]	184500: L175 [6.89] x W65 [2.56] x H22 [0.87] Mounting Center: 167 [6.57]			
	184501: L195 [7.68] x W65 [2.56] x H22 [0.87] Mounting Center: 187 [7.36]			
Meas. Battery pack mm [inch]	9.6V 1.0Ah: L228 [8.98] x W30 [1.18] x H17 [0.67] Mounting Center: 217 [8.54]			
	9.6V 2.0Ah: L195 [7.68] x W45.5 [1.79] x H24.5 [0.96] Mounting Center: 184 [7.24]			
	9.6V 4.0/5.0Ah: L263 [10.35] x W65 [2.56] x H35 [1.38] Mounting Center: 252 [9.92]			

# CLASS 2 OUTPUT LED EMERGENCY DRIVER

18470X-X

## • FEATURES



18470X-1



18470X-2



18470X-3

1. Emergency operation of LED luminaires, for both factory and field installation
2. Perfectly compatible with most AC LED drivers
3. Constant emergency power output: Class 2 output voltage (10-60V), output current auto adjustable
4. Various emergency power options:

18470X	Emergency power
184700	5W
184701	9W
184702	15W
184703	25W

5. Various connection options:

Type	Connection way	UL approval
18470X-1	Terminal block, external battery	UL Recognized
18470X-2	External wires, built-in battery	UL Listed
18470X-3	External wires with metal conduits, built-in battery	UL Listed

6. Auto Test
7. Slim aluminum housing
8. Suitable for indoor, dry and damp applications

## • CHARACTERISTICS

Type	184700-X	184701-X	184702-X	184703-X
Rated voltage	120-277VAC 50/60Hz			
Rated current	0.04A	0.05A	0.07A	0.1A
Rated power	2W	3W	4.5W	5.5W
Emergency output power	5W	9W	15W	25W
Output voltage	10-60VDC	11-60VDC	15-60VDC	25-60VDC
Output current of AC driver	5A (Max.)			
Operation frequency	320kHz $\geq$ f $\geq$ 50kHz			
Power factor	0.5			
Battery	Ni-MH/Li-ion			
Charging time	24 Hours			
Discharge time	>90 Minutes			
Charging current	0.08A	0.11A	0.19A	0.23A
Life time	5 Years			
Charging cycles	>500			
Operation temperature	0-50°C (32°F-122°F)			
Efficiency	80%			
Abnormal protection	Over load, Inrush current limiting, over temperature, open circuit, short-circuit protection with auto-reset			
Wire	0.75-1.5mm <sup>2</sup>			
EMC/FCC/IC standard	EN55015, EN61547, EN61000-3-2, EN61000-3-3, FCC part 15, ICES-005			
Safety standard	EN61347-1, EN61347-2-7, UL924, CSA C.22.2 No. 141			
Meas. Module 18470X-1 mm [inch]	L125 [4.92] x W65 [2.56] x H22 [0.87] Mounting Center: 117 [4.61]			
Meas. Battery pack 18470X-1 mm [inch]	9.6V 1.5Ah: L126 [4.96] x W59 [2.32] x H17 [0.67] Mounting center: 115 [4.53]			
	10.8V 2.1Ah: L176 [6.93] x W51 [2.01] x H19.5 [0.77] Mounting center: 165 [6.50]			
	10.8V 3.8Ah: L241 [9.49] x W56 [2.20] x H21 [0.83] Mounting center: 230 [9.06]			
	14.4V 4.5Ah: L227 [8.94] x W78 [3.07] x H28.4 [1.12] Mounting center: 216 [8.50]			
Meas. 18470X-2 mm [inch]	184700-2: L260 [10.24] x W65 [2.56] x H22 [0.87] Mounting center: 252 [9.92]			
	184701-2: L307 [12.09] x W65 [2.56] x H22 [0.87] Mounting center: 299 [11.77]			
	184702-2: L372 [14.65] x W65 [2.56] x H22 [0.87] Mounting center: 364 [14.33]			
	184703-2: L358 [14.09] x W82 [3.23] x H30 [1.18] Mounting center: 351 [13.82]			
Meas. 18470X-3 mm [inch]	184700-3: L260 [10.24] x W65 [2.56] x H22 [0.87] Mounting center: 252 [9.92]			
	184701-3: L307 [12.09] x W65 [2.56] x H22 [0.87] Mounting center: 299 [11.77]			
	184702-3: L372 [14.65] x W65 [2.56] x H22 [0.87] Mounting center: 364 [14.33]			
	184703-3: L358 [14.09] x W82 [3.23] x H30 [1.18] Mounting center: 351 [13.82]			



# LINEAR LED EMERGENCY DRIVER

18490X-X

## • FEATURES

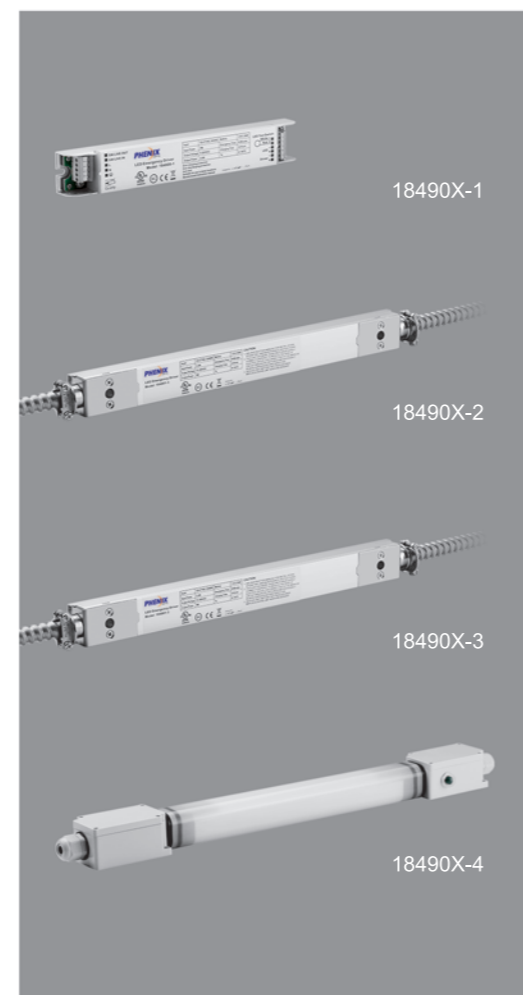
1. Emergency operation of both DC LED loads and AC LED tubes or bulbs, factory and field installation
2. Perfectly compatible with most AC LED drivers
3. Constant emergency power output: Wide range of output voltage up to 300VDC, output current auto adjustable
4. Various emergency power options:

18490X	Emergency power
184900	4.5W
184901	9W
184902	13.5W
184903	18W

5. Various connection options:

18490X-X	Description
18490X-1	Terminal block
18490X-2	External wires with metal conduits, simpler wiring for AC luminaire
18490X-3	External wires with metal conduits, for DC LED load and AC luminaire
18490X-4	IP66 Waterproof, for AC luminaire

6. Auto Test
7. Extremely slim aluminum housing, built-in battery
8. For 18490X-1/2/3: Suitable for indoor, dry and damp applications
9. For 18490X-4: IP66 rating. Suitable for outdoor and wet applications



## • CHARACTERISTICS

Type	184900-X	184901-X	184902-X	184903-X
Rated voltage	120-277VAC 50/60Hz			
Rated current	0.03A	0.04A	0.06A	0.08A
Rated power	2.7W	3.5W	4.5 W	6W
Emergency output power	4.5W	9W	13.5W	18W
Output voltage	5-200VDC	10-300VDC	15-300VDC	20-300VDC
Output current of AC driver	3A (Max.)			
Operation frequency	320kHz≥f≥50kHz			
Power factor	0.5			
Battery	Li-ion			
Charging time	24 Hours			
Discharge time	>90 Minutes			
Charging current	0.17A			
Life time	5 Years			
Charging cycles	>1000			
Operation temperature	0-50°C (32°F-122°F)			
Efficiency	80%			
Abnormal protection	Over load, over temperature, open circuit, short-circuit protection with auto-reset			
Wire	0.75-1.5mm <sup>2</sup>			
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3; FCC part 15; ICES-005			
Safety standard	EN 61347-1, EN 61347-2-7, UL924, CSA C.22.2 No. 141			
Meas. 18490X-1 mm [inch]	184900-1: L200 [7.87] x W30 [1.18] x H22 [0.87] Mounting center: 190 [7.48]			
	184901-1: L260 [10.24] x W30 [1.18] x H22 [0.87] Mounting center: 250 [9.84]			
	184902-1: L345 [13.58] x W30 [1.18] x H22 [0.87] Mounting center: 335 [13.19]			
Meas. 18490X-2/3 mm [inch]	184903-1: L410 [16.14] x W30 [1.18] x H22 [0.87] Mounting center: 400 [15.75]			
	184900-2/3: L258 [10.16] x W30 [1.18] x H22 [0.87] Mounting center: 209 [8.23]			
	184901-2/3: L318 [12.52] x W30 [1.18] x H22 [0.87] Mounting center: 269 [10.59]			
Meas. 18490X-4 mm [inch]	184902-2/3: L403 [15.87] x W30 [1.18] x H22 [0.87] Mounting center: 354 [13.94]			
	184903-2/3: L468 [18.43] x W30 [1.18] x H22 [0.87] Mounting center: 419 [16.50]			
	184900-4: L530±4 [20.87±0.16] x W56 [2.20] x H44 [1.73] Mounting center: 460 [18.11]			
	184901-4: L590±4 [23.23±0.16] x W56 [2.20] x H44 [1.73] Mounting center: 520 [20.47]			
	184902-4: L675±4 [26.57±0.16] x W56 [2.20] x H44 [1.73] Mounting center: 605 [23.82]			
	184903-4: L740±4 [29.13±0.16] x W56 [2.20] x H44 [1.73] Mounting center: 670 [26.38]			



# FLUORESCENT EMERGENCY BALLAST

184000



## • FEATURES

1. For emergency operation of fluorescent lamps
2. Transition from normal to emergency mode within 0.3 seconds
3. Built-in high temperature battery pack



## • CHARACTERISTICS

Type	184000
Lamp type	Most 2'- 4' single bipin T8 to T12, 17W, 18W, 32W, 36W, T5 28W, compact 42W, circular 40W fluorescent lamps
Rated voltage	120-277VAC 50/60Hz
Rated current	0.04A
Rated power	3.5W
Operation frequency	320kHz $\geq$ f $\geq$ 50kHz
Power factor	0.5
Battery	Ni-Cd
Charging time	24 Hours
Discharge time	>90 Minutes
Charging current	0.11A
Life time	5 Years
Charging cycles	>500
Operation temperature	0-50°C (32°F-122°F)
Initial lumen output	500LM
Efficiency	70%
Abnormal protection	Over load, over current, inrush current limiting, short circuit, open circuit
Wire	18AWG/0.75mm <sup>2</sup>
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3; FCC part 18; ICES-005
Safety standard	EN 61347-1, EN 61347-2-7, UL924, CSA C.22.2 No. 141
Meas. mm [inch]	L242 [9.53] x W52 [2.05] x H26 [1.02] Mounting Center: 230 [9.06]

# INTEGRATED FLUORESCENT AC + EMERGENCY BALLAST

184009



## • FEATURES

1. For normal and emergency operation of fluorescent lamps, no need an extra electronic ballast
2. Transition from normal to emergency mode within 0.3 seconds
3. Replaceable built-in high temperature battery pack
4. Aluminum housing



## • CHARACTERISTICS

Type	184009
Lamp type	T8 2x17W, 2x18W, 1x17W, 1x18W, 1x32W, 1x36W
Rated voltage	120-277VAC 50/60Hz
Rated current	0.44A
Rated power	44W
Operation frequency	320kHz $\geq$ f $\geq$ 50kHz
Power factor	0.9
Battery	Ni-Cd
Charging time	24 Hours
Discharge time	>90 minutes
Charging current	0.13A
Life time	5 Years
Charging cycles	>500
Operation temperature	0-50°C (32°F-122°F)
Initial lumen output	500LM
Efficiency	70%
Abnormal protection	Over voltage, over current, Inrush current limiting, short circuit, open circuit
Wire	0.75-1.5mm <sup>2</sup>
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, FCC part 18; ICES-005
Safety standard	EN 61347-1, EN 61347-2-3, EN 61347-2-7, UL924, CSA C.22.2 No. 141
Meas. mm [inch]	L250 [9.84] x W65 [2.56] x H28.5 [1.12] Mounting Center: 242 [9.53]

# UNIVERSAL FLUORESCENT EMERGENCY BALLAST

184010-1



## • FEATURES

1. For emergency operation of fluorescent lamps
2. Transition from normal to emergency mode within 0.3 seconds
3. Over-discharge protection to extend the battery's life time
4. External replaceable high temperature battery pack



## • CHARACTERISTICS

Type	184010-1
Lamp type	Most 2'- 4' single bipin T8 to T12, 17W, 18W, 32W, 36W, T5 28W, compact 42W, circular 40W fluorescent lamps
Rated voltage	120-277VAC 50/60Hz
Rated current	0.05A
Rated power	3.5W
Operation frequency	320kHz $\geq$ f $\geq$ 50kHz
Power factor	0.5
Battery	Ni-Cd
Charging time	24 Hours
Discharge time	>90 Minutes
Charging current	0.13A
Life time	5 Years
Charging cycles	>500
Operation temperature	0-50°C (32°F-122°F)
Initial lumen output	500LM
Efficiency	70%
Abnormal protection	Over voltage, over current, Inrush current limiting, short circuit, open circuit
Wire	0.75-1.5mm <sup>2</sup>
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3; FCC part 18; ICES-005
Safety standard	EN 61347-1, EN 61347-2-7; UL924, CSA C.22.2 No. 141
Meas. Module mm [inch]	L150 [5.91] x W49 [1.93] x H30.5 [1.20] Mounting Center: 140 [5.51]
Meas. Battery pack mm [inch]	L200 [7.87] x W32 [1.26] x H25 [0.98] Mounting Center: 190 [7.48]

# MINI EMERGENCY INVERTER

18460X



## • FEATURES

1. Pure sinusoidal AC output
2. Patented APD technology - Auto Preset Dimming (0-10V) the connected load in emergency mode
3. Output voltage auto setting according to different input voltages
4. Auto Test
5. Extremely slim aluminum housing and light in weight
6. Suitable for indoor, dry and damp applications



## • CHARACTERISTICS

Type	184600	184601	184602
Lamp type	LED, fluorescent or incandescent bulbs, tubes and lighting fixtures		
Rated voltage	120-277VAC 50/60Hz		
Rated current	0.06A	0.48A	
Rated power	7W	35W	
Power factor	0.5-0.9 leading to lagging	0.5 leading to lagging	0.9 leading to lagging
Output voltage	120-277VAC 50/60Hz		
Output power	36W	100W	200W
Max. power of 0-10V dimming load	360W	1000W@120V and 2000W@277V	
Battery	Li-ion		
Charging time	24 Hours	12 Hours	24 Hours
Discharge time	90 Minutes		
Charging current	0.34A	0.6A	
Life time	5 Years		
Charging cycles	>1000		
Operation temperature	0-50°C (32°F-122°F)		
Efficiency	80%	84%	85%
Abnormal protection	Over voltage, over current, Inrush current limiting, over temperature, short circuit, open circuit		
Wire	16-18AWG/0.75-1.5mm <sup>2</sup>		
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, FCC part 15, ICES-005		
Safety standard	EN 61347-1, EN 61347-2-7, UL924, CSA C.22.2 No. 141		
Meas. mm [inch]	L346 [13.62] x W82 [3.23] x H30 [1.18] Mounting center: 338 [13.31]	L346 [13.63] x W115 [4.53] x H41.5 [1.63] Mounting center: 338 [13.31]	L479 [18.86] x W115 [4.53] x H41.5 [1.63] Mounting center: 471 [18.55]

# PARALLELEABLE MODULAR INVERTER

184804



## • FEATURES

1. Pure sinusoidal AC output
2. Patented APD technology - Auto Preset Dimming (0-10V) the connected load in emergency mode
3. Modular design, flexibly parallelable combination from 1 to 5 modules, Max. emergency output power up to 2000W
4. Output voltage auto setting according to different input voltages
5. Auto Test
6. Extremely slim aluminum housing and light in weight
7. Suitable for indoor, dry and damp applications



## • CHARACTERISTICS

Type	184804
Lamp type	LED, fluorescent or incandescent bulbs, tubes and lighting fixtures
Rated voltage	120-277VAC 50/60Hz
Rated current	1A
Rated power	65W
Power factor	0.5-0.9 leading to lagging
Output voltage	120-277VAC 50/60Hz
Output power	400W
Max. power of 0-10V dimming load	2000W@120V; 4000W@277V
Battery	LiFePO4
Charging time	24 Hours
Discharge time	90 Minutes
Charging current	1.44A
Life time of module	5 Years
Charging cycles	>2000
Operation temperature	0-50°C (32°F-122°F)
Efficiency	85%
Abnormal protection	Over voltage, over current, Inrush current limiting, over temperature, short circuit, open circuit
Wire	10-18AWG/1.0-6.0mm <sup>2</sup>
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, FCC part 15, ICES-005
Safety standard	EN 61347-1, EN 61347-2-7, UL924, CSA C.22.2 No. 141
Meas. mm [inch]	L605 [23.82] x W280 [11.02] x H60 [2.36] Mounting center: 534 [21.02]

# DIMMABLE EMERGENCY LIGHTING CONTROL DEVICE

18010-X

## • FEATURES

1. Patented APD technology allows generator or inverter supplied emergency lighting to work under auto or preset 0-10V dimming level regardless of wall switch position
2. Great energy and cost saving benefits by reducing the power consumption for the emergency lighting
3. Flexible and precise setting to distribute and make the utmost use of the power of a 10-1000W generator or inverter
4. Dimmer, sensor or other lighting controls override capable
5. 24VDC fire alarm override capable
6. Various connection options:

18010-X	Description
18010-1	Terminal block
18010-3	External wires with metal conduits

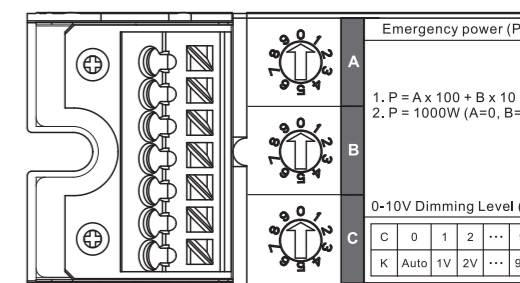
7. Extremely slim aluminum housing
8. Suitable for indoor, dry and damp applications



18010-1



18010-3



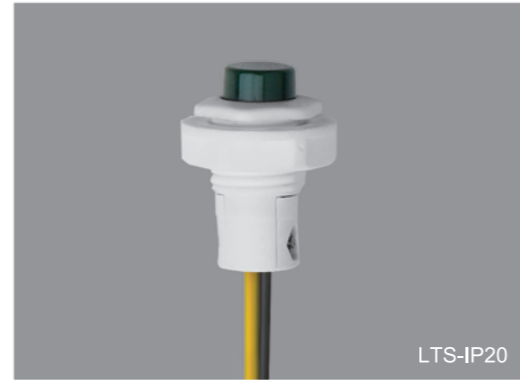
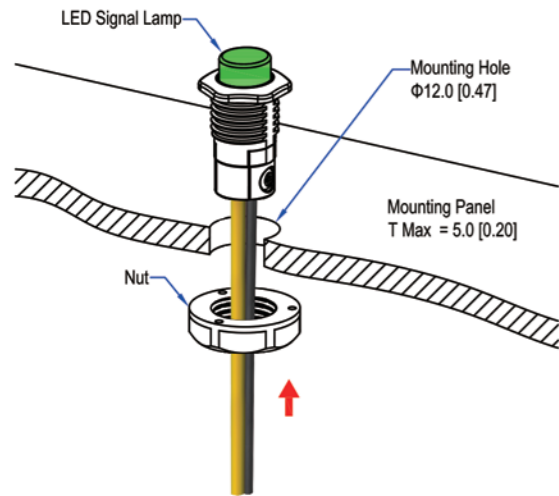
Type	18010-1	18010-3
Rated voltage	120-277VAC 50/60Hz	
Rated current	20mA	
Max. throughput current	5A	
Input emergency power	10-600W@120V; 10-1000W@277V (Set by the dipswitch A and B)	
Output 0-10V dimming level	Auto dimming or preset of 1V, 2V -- 9V (Set by the dipswitch C)	
Max. 0-10V Load power	600W@120V; 1385W@277V	
Life time	5 Years	
Operating temp	-20-65°C (4° F- 149° F)	
Wire	16-18AWG/0.75-1.5mm <sup>2</sup>	
EMC/FCC/IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, FCC part 15, ICES-005	
Safety standard	EN 61347-1, EN 61347-2-7, UL924, CSA C.22.2 No. 141	
Meas. mm [inch]	L153 [6.02] x W30 [1.18] x H22 [0.87] Mounting center: 143 [5.63]	L211 [8.31] x W30 [1.18] x H22 [0.87] Mounting center: 162 [63.8]

# LED TEST SWITCH

LTS

## • FEATURES

1. Test switch and LED signal lamp are in one component
2. Field switch on and off tests for over 10,000 times
3. Suitable for all types of Phenix LED emergency drivers and inverters
4. CE and UL evaluated with Phenix LED emergency modules
5. Easy mounting and replacement
6. IP20 and IP66 selectable



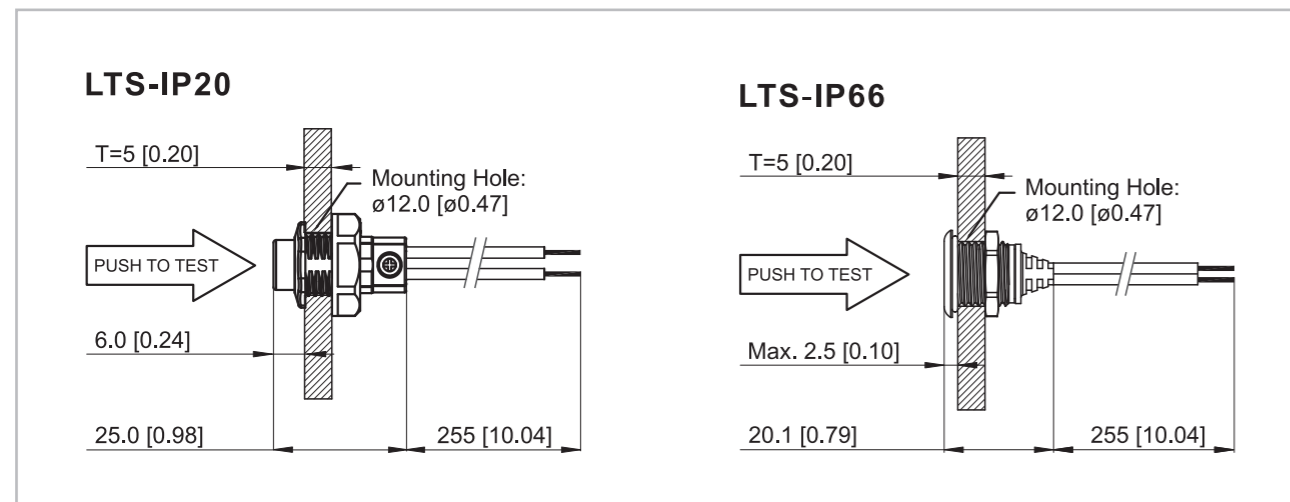
LTS-IP20



LTS-IP66

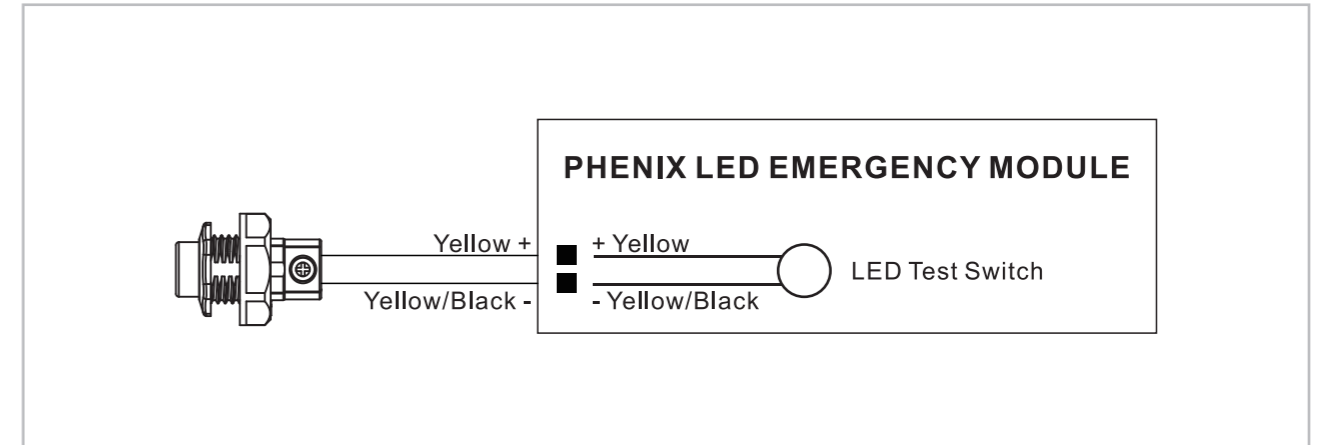
All-metal housing with flexible cable relief, IP66 for outdoor and wet applications

## • DIMENSIONS AND INSTALLATION



Dimension unit: mm [inch] Tolerance: ±1.0mm [0.04]

## • WIRING DIAGRAM



## • OPERATION/TESTING/INDICATION

### OPERATION

1. Normal mode - When the AC power is applied, the lighting system works in a normal mode. The LED test switch is illuminated, indicating the batteries are being charged
2. Emergency mode - When the AC power fails, the lighting system automatically switches to emergency power, operating the lighting load at rated emergency power. The LED test switch goes out, indicating the batteries are being discharged

### MANUAL TEST

1. Press the LTS 1 time to force a ten-second emergency test
2. Press the LTS 2 times continuously within 5 seconds to force a 30-second monthly test. After the test is completed, the next (30-day) monthly test will count from this date
3. Press the LTS 3 times continuously within 5 seconds to force a 90-minute annual test. After the test is completed, the next (52-week) annual test will count from this date
4. During any manual test, press and hold the LTS for greater than 3 seconds to terminate a manual test. The Preprogrammed Scheduled Auto Test time will not change
5. A short term discharge test may be conducted after the lighting system has been charging for 1 hour. Charge for 24 hours before conducting a long term discharge test

### LED TEST SWITCH CONDITIONS

1. LTS Slow Blinking: Normal Charging
2. LTS On: Battery Fully Charged - Normal Mode
3. LTS Off: Power Failure
4. LTS Gradual Change: In Testing Mode
5. LTS Quickly Blinking: Abnormal Condition - Corrective Action Required

# INSTALLATION

## • INSIDE THE LIGHTING FIXTURE



• OUTSIDE THE LIGHTING FIXTURE

