

EMERGENCY SPECIALIST



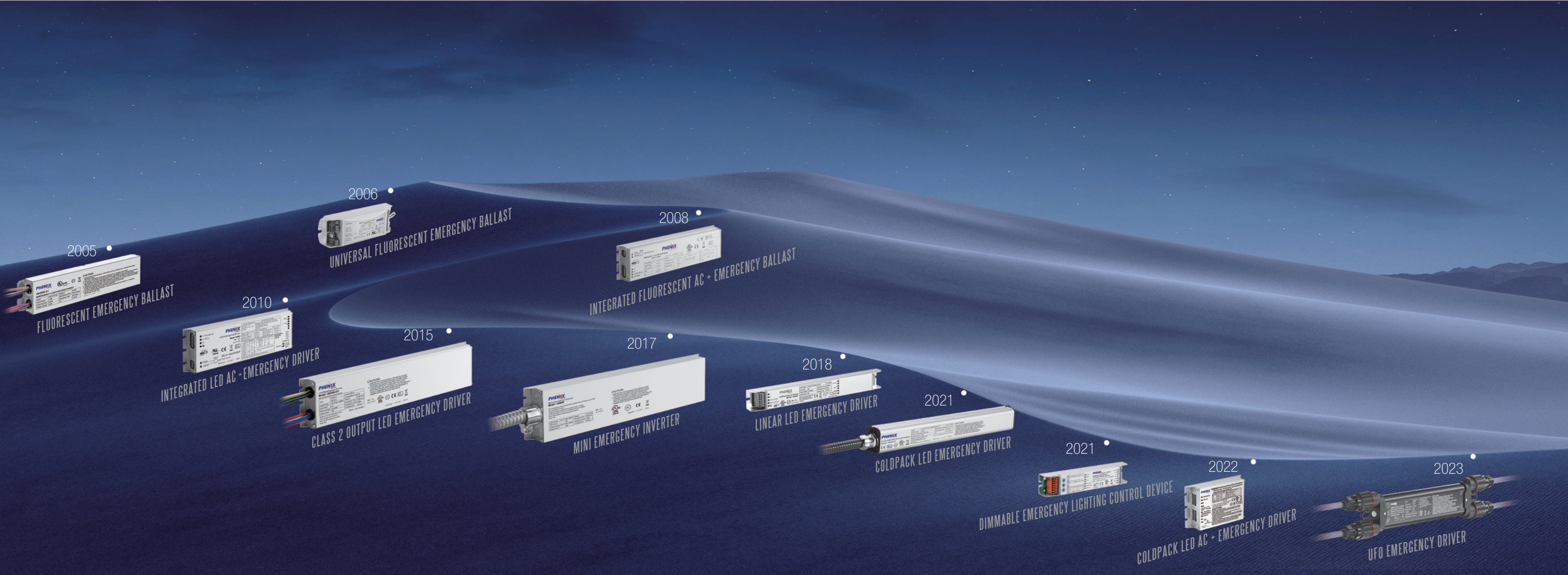
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MILESTONES



SLIM SIZE

POWERFUL

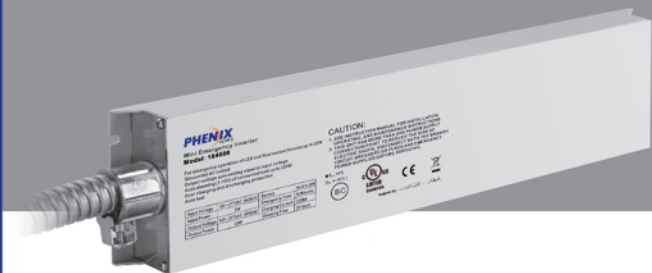
RELIABLE

DURABLE

MINI EMERGENCY INVERTER

DIMMABLE EMERGENCY
LIGHTING CONTROL DEVICECOLD-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 current or power	Emergency power	Lumens @120 LM/W	Approval			
												
LED emergency driver												
184301-X	–40-50°C	AC 120-277V	DC 10-300V	•		Max. 5A	9W	1080	•		•	•
184302-X	–40-50°C	AC 120-277V	DC 20-300V	•		Max. 5A	18W	2160	•		•	•
184303-X	–40-50°C	AC 120-277V	DC 30-400V	•		Max. 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		•	•	•
184502	–40-50°C	AC 120-277V	DC 22-45V	•	•	Max. 14W	6W	720	•		•	•
184503	–40-50°C	AC 120-277V	DC 22-45V	•	•	Max. 33W	6W	720	•		•	•
184700-1	0-50°C	AC 120-277V	DC 10-60V	•		Max. 5A	5W	600		•	•	•
184701-1	0-50°C	AC 120-277V	DC 11-60V	•		Max. 5A	9W	1080		•	•	•
184702-1	0-50°C	AC 120-277V	DC 15-60V	•		Max. 5A	15W	1800		•	•	•
184703-1	0-50°C	AC 120-277V	DC 25-60V	•		Max. 5A	25W	3000		•	•	•
184700-2/3	0-50°C	AC 120-277V	DC 10-60V	•		Max. 5A	5W	600	•		•	•
184701-2/3	0-50°C	AC 120-277V	DC 11-60V	•		Max. 5A	9W	1080	•		•	•
184702-2/3	0-50°C	AC 120-277V	DC 15-60V	•		Max. 5A	15W	1800	•		•	•
184703-2/3	0-50°C	AC 120-277V	DC 25-60V	•		Max. 5A	25W	3000	•		•	•
184900-X	0-50°C	AC 120-277V	DC 5-200V	•		Max. 3A	4.5W	540	•		•	•
184901-X	0-50°C	AC 120-277V	DC 10-300V	•		Max. 3A	9W	1080	•		•	•
184904-X	0-50°C	AC 120-277V	DC 10-300V	•		Max. 3A	10W	1200	•		•	•
184902-X	0-50°C	AC 120-277V	DC 15-300V	•		Max. 3A	13.5W	1620	•		•	•
184903-X	0-50°C	AC 120-277V	DC 20-300V	•		Max. 3A	18W	2160	•		•	•
184401-X	0-50°C	AC 120-480V	DC 170V/280V/400V	•		Max. 8A	20W Max.	2400	•		•	•
184402-X	0-50°C	AC 120-480V	DC 170V/280V/400V	•		Max. 8A	40W Max.	4800	•		•	•
184403-X	0-50°C	AC 120-480V	DC 170V/280V/400V	•		Max. 8A	60W Max.	7200	•		•	•
Fluorescent emergency ballast												
184000	0-50°C	AC 120-277V				17W,18W,32W,36W	5W	500	•			
184010-1	0-50°C	AC 120-277V				17W,18W,32W,36W	5W	500		•		•
184011	0-50°C	AC 120-277V				17W,18W,32W,36W	6W	600		•		•
184009	0-50°C	AC 120-277V			•	17W,18W,32W,36W	5W	500		•		•
Emergency inverter												
184600	0-50°C	AC 120-277V	AC 120-277V Auto setting	•		Max.360W with 0-10V	36W	4320	•		•	•
184603	0-50°C	AC 120-277V	AC 120-277V Auto setting	•		Max.270W with 0-10V	27W	3240	•		•	•
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	•		•	•
Emergency lighting control device												
18010-X	–20-65°C	AC 120-277V	AC 120-277V	•			10 - 600W @120V	1200-120000	•			•
							10 - 1000W @277V					



COLDPACK 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

18430X-X-VV	Variable voltage output 10-400V DC For DC LED load and Non-dimmable AC luminaire
18430X-X-FV	Fixed voltage output 170V DC For 0-10V dimmable AC luminaire

- 3. Constant emergency power output, wide range of output voltage from 10 to 400V DC, output current auto adjustable

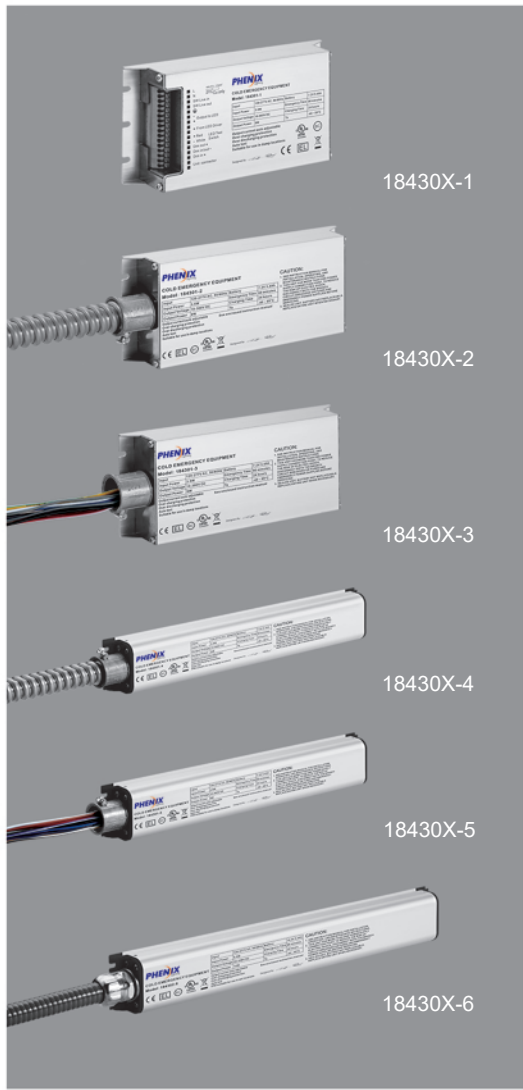
- 4. Various emergency power options:

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

- 5. Various structures options:

18430X-X	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	120-277V AC 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 (-VV)	10-300V DC	20-300V DC	30-400V DC
Output voltage (-FV)	170V DC	170V DC	170V DC
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	168mA		
Life time	5 Years		
Charging cycles	>1000		
Operation temperature	-40-50°C (-40° F-122° F)		
Efficiency	80%		
Abnormal protection	Over load, over current, inrush, over voltage, over temperature, charging and discharging, open circuit, short circuit protection with auto reset		
Wire	0.75-1.5mm² / 18-16AWG		
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]		
	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]		

HIPOWER LED EMERGENCY DRIVER

18440X-SUR

• FEATURES



- 1. Fast wiring and installation without opening the housing of the luminaire or the emergency driver
- 2. Auto dimming (0-10V) of connected load up to 10 times of emergency power
- 3. High voltage DC output
- 4. Constant emergency power output
- 5. Auto Test
- 6. Extremely slim aluminium housing and light in weight, built-in battery

• CHARACTERISTICS

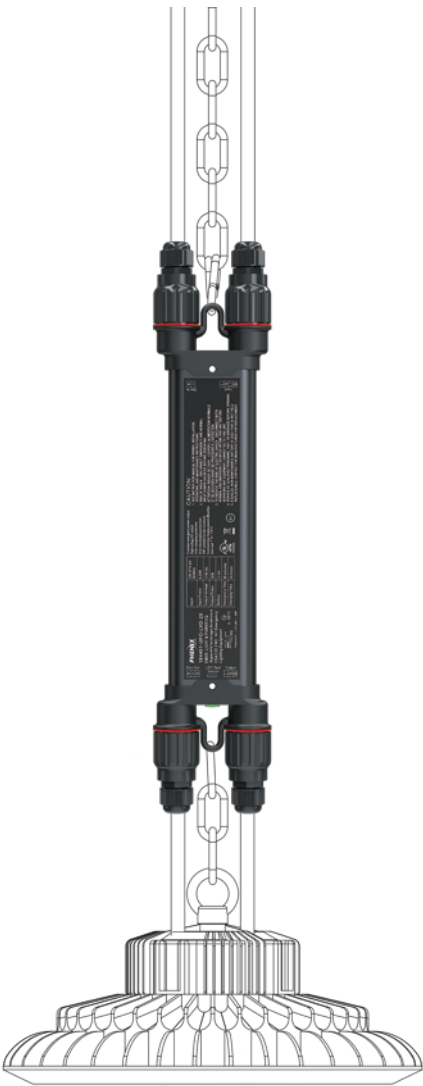
Type	184401-SUR -LVD-20	184402-SUR -LVD-40	184403-SUR -LVD-60	184401-SUR -HVD-20	184402-SUR -HVD-40	184403-SUR -HVD-60
Lamp type	LED High-bay or UFO luminaire					
Rated voltage	120-277V AC 50/60Hz			277-480V AC 50/60Hz		
Output voltage	170V DC			400V DC		
Rated current	0.04-0.09A	0.05-0.11A	0.05-0.14A	0.04-0.08A	0.04-0.09A	0.05-0.09A
Rated power	6-9W	7.5-11W	10-14.5W	6.5-12.5W	7.5-14.5W	11-17W
Power Factor	>0.75@120V			>0.6@277V		
Max. Output power	20W	40W	60W	20W	40W	60W
Max. power of 0-10V dimming load	200W	400W	600W	200W	400W	600W
	The luminaire's minimum dimming power should be less than or equal to the Max. Output power of LED emergency driver.					
Battery	Li-ion					
Charging time	24 Hours					
Discharge	90 Minutes					
Charging current	500mA	600mA	825mA	500mA	600mA	825mA
Life time of module	5 Years					
Charging cycles	>1000					
Operation temperature	0-50°C(32°F-122°F)					
Efficiency	85%					
Abnormal protection	Over load, open circuit , inrush, over temperature, charging and discharging, short circuit protection					
Wire	0.75-2.5mm² / 18-14AWG					
EMC/FCC/IC standard	FCC part 15, ICES-005					
Safety standard	UL924, CSA C.22.2 No. 141					
Meas. mm [inch]	184401-SUR-LVD: L280 [11.02] x W71.1 [2.80] x H26.1 [1.03] Mounting center: 270 [10.63] 184402- SUR -LVD: L350 [13.78] x W71.1 [2.80] x H26.1 [1.03] Mounting center: 340 [13.39] 184403- SUR -LVD: L420 [16.54] x W71.1 [2.80] x H26.1 [1.03] Mounting center: 410 [16.14] 184401- SUR -HVD: L310 [12.20] x W71.1 [2.80] x H26.1 [1.03] Mounting center: 300 [11.81] 184402- SUR -HVD: L380 [14.96] x W71.1 [2.80] x 26.1 [1.03] Mounting center: 370 [14.57] 184403- SUR -HVD: L450 [17.72] x W71.1 [2.80] x 26.1 [1.03] Mounting center: 440 [17.32]					



UFO EMERGENCY KIT

18440X-UFO

• FEATURES



- 1. Fast wiring and installation without opening the housing of the luminaire or the emergency driver
- 2. Auto dimming (0-10V) of connected load up to 10 times of emergency power
- 3. High voltage DC output
- 4. Constant emergency power output
- 5. Auto Test
- 6. Extremely slim aluminium housing and light in weight, built-in battery
- 7. IP67 rating, suitable for outdoor and wet applications

IP67

UL

US

LISTED

BC

• CHARACTERISTICS

Type	184401-UFO-LVD-20	184402-UFO-LVD-40	184403-UFO-LVD-60	184401-UFO-HVD-20	184402-UFO-HVD-40	184403-UFO-HVD-60
Lamp type	LED High-bay or UFO luminaire					
Rated voltage	120-277V AC 50/60Hz			277-480V AC 50/60Hz		
Output voltage	170V DC			400V DC		
Rated current	0.04-0.09A	0.05-0.11A	0.05-0.14A	0.04-0.08A	0.04-0.09A	0.05-0.09A
Rated power	6-9W	7.5-11W	10-14.5W	6.5-12.5W	7.5-14.5W	11-17W
Power Factor	>0.75@120V			>0.6@277V		
Max. Output power	20W	40W	60W	20W	40W	60W
Max. power of 0-10V dimming load	200W	400W	600W	200W	400W	600W
The luminaire's minimum dimming power should be less than or equal to the Max. Output power of LED emergency driver.						
Battery	Li-ion					
Charging time	24 Hours					
Discharge	90 Minutes					
Charging current	500mA	600mA	825mA	500mA	600mA	825mA
Life time of module	5 Years					
Charging cycles	>1000					
Operation temperature	0-50°C(32°F-122°F)					
Efficiency	85%					
Abnormal protection	Over load, open circuit , inrush, over temperature, charging and discharging, short circuit protection					
Wire	0.75-2.5mm² / 18-14AWG					
EMC/FCC/IC standard	FCC part 15, ICES-005					
Safety standard	UL924, CSA C.22.2 No. 141					
Meas. mm [inch]	184401-UFO-LVD: L470 [18.50] x W96 [3.78] x 38 [1.5]mm 184402-UFO-LVD: L540 [21.26] x W96 [3.78] x 38 [1.5]mm 184403-UFO-LVD: L610 [24.02] x W96 [3.78] x 38 [1.5]mm 184401-UFO-HVD: L500 [19.69] x W96 [3.78] x 38 [1.5]mm 184402-UFO-HVD: L570 [22.44] x W96 [3.78] x 38 [1.5]mm 184403-UFO-HVD: L640 [25.20] x W96 [3.78] x 38 [1.5]mm					

UFO EMERGENCY KIT

184401-UFO-MVD

• FEATURES



- 1. Quick wiring and installation
- 2. Auto dimming (0/1-10V) of connected load up to 10 times of emergency power
- 3. High voltage DC output
- 4. Constant emergency power output
- 5. Emergency output is convertible between 90 and 180 minutes
- 6. Auto Test
- 7. Extremely slim aluminium housing and light in weight, built-in battery
- 8. IP67 rating, suitable for outdoor and wet applications

IP67



• CHARACTERISTICS

Type	184401-UFO-MVD
Lamp type	UFO, High Bay or other waterproof LED luminaires
Rated voltage	220-240V AC 50/60Hz
Output voltage	300V DC
Rated current	0.04A
Rated power	8.8W
Power Factor	0.5
Max. Output power	20W
Max. power of 0-10V dimming load	200W The luminaire's minimum dimming power should be less than or equal to the Max. Output power of LED emergency driver.
Battery	Li-ion
Charging time	24 Hours
Discharge	90 Minutes at full output power (or 180 minutes at half of output power)
Charging current	500mA
Life time of module	5 Years
Charging cycles	>1000
Operation temperature	0-50°C(32°F-122°F)
Efficiency	80%
Abnormal protection	Over load, open circuit, inrush, over temperature, charging and discharging, short circuit protection
Wire	0.75-1.5mm² / 18-16AWG
EMC/ standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3
Safety standard	EN 61347-1, EN 61347-2-7
Meas. mm [inch]	L303 [11.9] x W75 [2.95] x 30 [1.18]mm

INTEGRATED LED AC + EMERGENCY DRIVER

184500/184501

• FEATURES

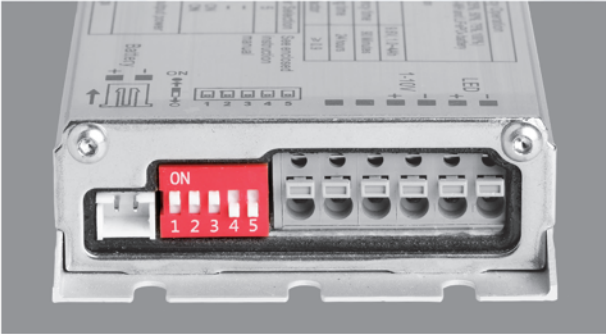


184500



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



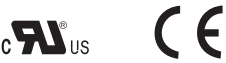
Dipswitch **1/2/3**: Setting LED working current in normal mode
Dipswitch **4/5**: Setting emergency output

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	184500-A2-8C1.0 184501-A1-8C1.0	184500-A2-8C2.0 184501-A1-8C2.0	184500-A2-8C4.0 184501-A1-8C4.0	184500-A2-8C5.0 184501-A1-8C5.0
Rated voltage	120-277V AC 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	18-60V DC			
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	50-250mA			
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	Inrush, over voltage, charging and discharging, open circuit , short circuit protection with auto reset			
Wire	0.75-1.5mm ² / 18-16AWG			
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]			



COLDPACK LED AC + EMERGENCY DRIVER

184502/184503



184502



184503

• FEATURES

- 1. For normal and emergency operation of LED load in extreme temperature from -40°C to +50°C (-40°F to +122°F), no need an extra LED driver
- 2. Phenix Lighting's innovative Battery Real-time Temperature Control (BRTC) Technology ensures that the battery can be charged and discharged well even at -40°C and the emergency time is over 90 minutes
- 3. Preset constant current output for AC driver function
- 4. Constant power output in emergency mode
- 5. Slim aluminum housing, built-in heating and insulation battery pack
- 6. Auto Test
- 7. Suitable for indoor, dry and damp applications

• CHARACTERISTICS

Type		184502	184503
Rated voltage		100-277V AC 50/60Hz	
Rated current @100V		0.24A	0.43A
Operation frequency		320kHz≥f≥50kHz	
Max. Input Power	Lighting	14W	33W
	Charging	2W	2W
	Heating	8W	8W
Power factor		0.9 @120V	
Output voltage		22-45V DC	
Output current		150-250mA preset	250-600mA preset
Emergency output power		6W	
Battery		Li-ion	
Charging time		24 Hours	
Discharge time		>90 Minutes	
Charging current		130mA	
Life time		5 years	
Charging cycles		>500	
Operation temperature		-40-50°C (-40-122°F)	
Efficiency		75%	80%
Abnormal protection		Inrush, over voltage, over temperature, charging and discharging, open circuit	
Wire		0.75mm² / 18AWG	
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, EN 61347-2-13, UL924,CSA C.22.2 No. 141	
Meas. mm [inch]		L134 [5.28] x W82 [3.23] x H30 [1.18] Mounting center: 124 [4.88]	L154 [6.06] x W82 [3.23] x H30 [1.18] Mounting center: 144 [5.67]



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:

18470X-X	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	120-277V AC 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	10-60V DC	11-60V DC	15-60V DC	25-60V DC
Output current of AC driver	5A (Max.)			
Operation frequency	320kHz≥f≥50kHz			
Power factor	0.5			
Battery	Ni-MH/Li-ion			
Charging time	24 Hours			
Discharge time	>90 Minutes			
Charging current	80mA	110mA	190mA	230mA
Life time	5 Years			
Charging cycles	>500			
Operation temperature	0-50°C (32°F-122°F)			
Efficiency	80%			
Abnormal protection	Inrush, over voltage, charging and discharging, open circuit , short circuit protection with auto reset			
Wire	0.75-1.5mm² / 18-16AWG			
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

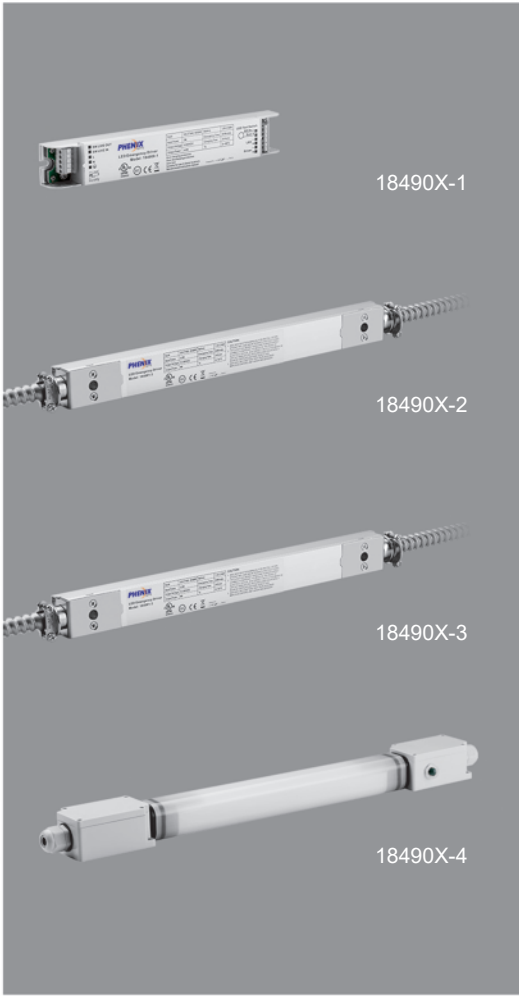
- 1. Emergency operation of both DC LED loads and AC LED tubes or bulbs, factory and field installation
- 2. Perfectly compatible with most AC LED drivers
- 3. Constant emergency power output: Wide range of output voltage up to 300V DC, output current auto adjustable
- 4. Various emergency power options:

18490X	Emergency power
184900	4.5W
184901	9W
184904	10W
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	184904-X	184902-X	184903-X
Rated voltage	120-277V AC 50/60Hz				
Rated current	0.03A	0.04A	0.04A	0.06A	0.08A
Rated power	2.2W	3.0W	3.0 W	4.0 W	5W
Emergency output power	4.5W	9W	10W	13.5W	18W
Output voltage	5-200V DC	10-300V DC	10-300V DC	15-300V DC	20-300V DC
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	170mA				
Life time	5 Years				
Charging cycles	>1000				
Operation temperature	0-50°C (32°F-122°F)				
Efficiency	80%				
Abnormal protection	Over load, over current, inrush, over voltage, over temperature, charging and discharging, open circuit, short circuit protection with auto reset				
Wire	0.75-1.5mm² / 18-16AWG				
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]				
	184901/4-1: 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]				
	184903-1: L410 [16.14] x W30 [1.18] x H22 [0.87] Mounting center: 400 [15.75]				
Meas. 18490X-2/3 mm [inch]	184900-2/3: L258 [10.16] x W30 [1.18] x H22 [0.87] Mounting center: 209 [8.23]				
	184901/4-2/3: L318 [12.52] x W30 [1.18] x H22 [0.87] Mounting center: 269 [10.59]				
	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]				
Meas. 18490X-4 mm [inch]	184900-4: L530±4 [20.87±0.16] x W56 [2.20] x H44 [1.73] Mounting center: 460 [18.11]				
	184901/4-4: 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 A1



• FEATURES

- 1. Perfectly compatible with most T5, T8, compact,PL and circular Type A and Type A+B LED Retrofit lamps
- 2. Built-in high temperature Ni-Cd battery pack



• CHARACTERISTICS

Type	184000 A1
Lamp type	Type A and Type A+B LED lamps
Rated voltage	120-277V AC 50/60Hz
Rated current	0.05A
Rated power	2.0W
Operation frequency	320kHz≥f≥50kHz
Power factor	0.5
Battery	Ni-Cd
Charging time	24 Hours
Discharge time	>90 Minutes
Charging current	110mA
Life time	5 Years
Charging cycles	>500
Operation temperature	0-50°C (32°F-122°F)
Output power	Max.4W
Efficiency	80%
Abnormal protection	Inrush, charging and discharging
Wire	0.75mm² / 18AWG
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. Normal and emergency mode conversion within 0.3 seconds
- 3. Built-in battery pack replaceable
- 4. Aluminum housing



• CHARACTERISTICS

Type	184009
Lamp type	T8 2x17W, 2x18W, 1x17W, 1x18W, 1x32W, 1x36W
Rated voltage	120-277V AC 50/60Hz
Rated current	0.44A
Rated power	44W
Operation frequency	320kHz≥f≥50kHz
Power factor	0.9
Battery	Ni-Cd
Charging time	24 Hours
Discharge time	>90 minutes
Charging current	130mA
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, over voltage, charging and discharging, open circuit , short circuit protection with auto reset
Wire	0.75-1.5mm² / 18-16AWG
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]	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. Normal and emergency mode conversion within 0.3 seconds
- 3. Over-discharge protection to extend the batteries' life time
- 4. External high temperature Ni-CD 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	120-277V AC 50/60Hz
Rated current	0.05A
Rated power	3.5W
Operation frequency	320kHz≥f≥50kHz
Power factor	0.5
Battery	Ni-Cd
Charging time	24 Hours
Discharge time	>90 Minutes
Charging current	130mA
Life time	5 Years
Charging cycles	>500
Operation temperature	0-50°C (32°F-122°F)
Initial lumen output	500LM
Efficiency	70%
Abnormal protection	Inrush, charging and discharging
Wire	0.75-1.5mm² / 18-16AWG
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	184603	184601	184602
Lamp type	LED, fluorescent or incandescent bulbs, tubes and lighting fixtures			
Rated voltage	120-277V AC 50/60Hz			
Rated current	0.1A	0.1A	0.48A	0.48A
Rated power	7W	7W	35W	35W
Power factor	0.5-0.9 leading to lagging	0.5-0.9 leading to lagging	0.5 leading to lagging	0.9 leading to lagging
Output voltage	120-277V AC 50/60Hz			
Output power	36W	27W	100W	200W
Max. power of 0-10V dimming load	360W	270W	900W @120V	1500W@277V
Battery	Li-ion			
Charging time	24 Hours	24 Hours	12 Hours	24 Hours
Discharge time	90 Minutes			
Charging current	340mA	340mA	600mA	600mA
Life time	5 Years			
Charging cycles	>1000			
Operation temperature	0-50°C (32°F-122°F)			
Efficiency	80%	80%	84%	85%
Abnormal protection	Over load, over current, inrush, over voltage, over temperature, charging and discharging, open circuit, short circuit protection with auto reset			
Wire	0.75mm²/18AWG	0.75mm²/18AWG	0.75-1.5mm²/18-16AWG	0.75-1.5mm²/18-16AWG
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 [13.62] x W82 [3.23] x H30 [1.18] Mounting center: 338 [13.31]	L346 [13.62] 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 [18.54]

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. 24V DC fire alarm override capable
- 6. Various connection options:

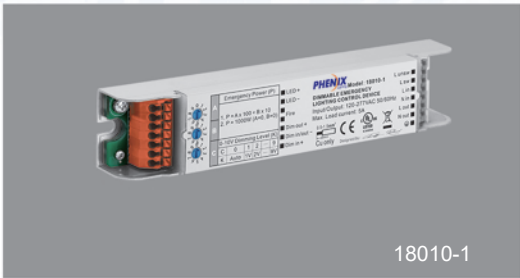
18010-X	Description
18010-1	Terminal block
18010-3	External wires with metal conduits

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



• CHARACTERISTICS

Type	18010-1	18010-3
Rated voltage	120-277V AC 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	0.75-1.5mm² / 18-16AWG	
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 [6.38]



18010-1

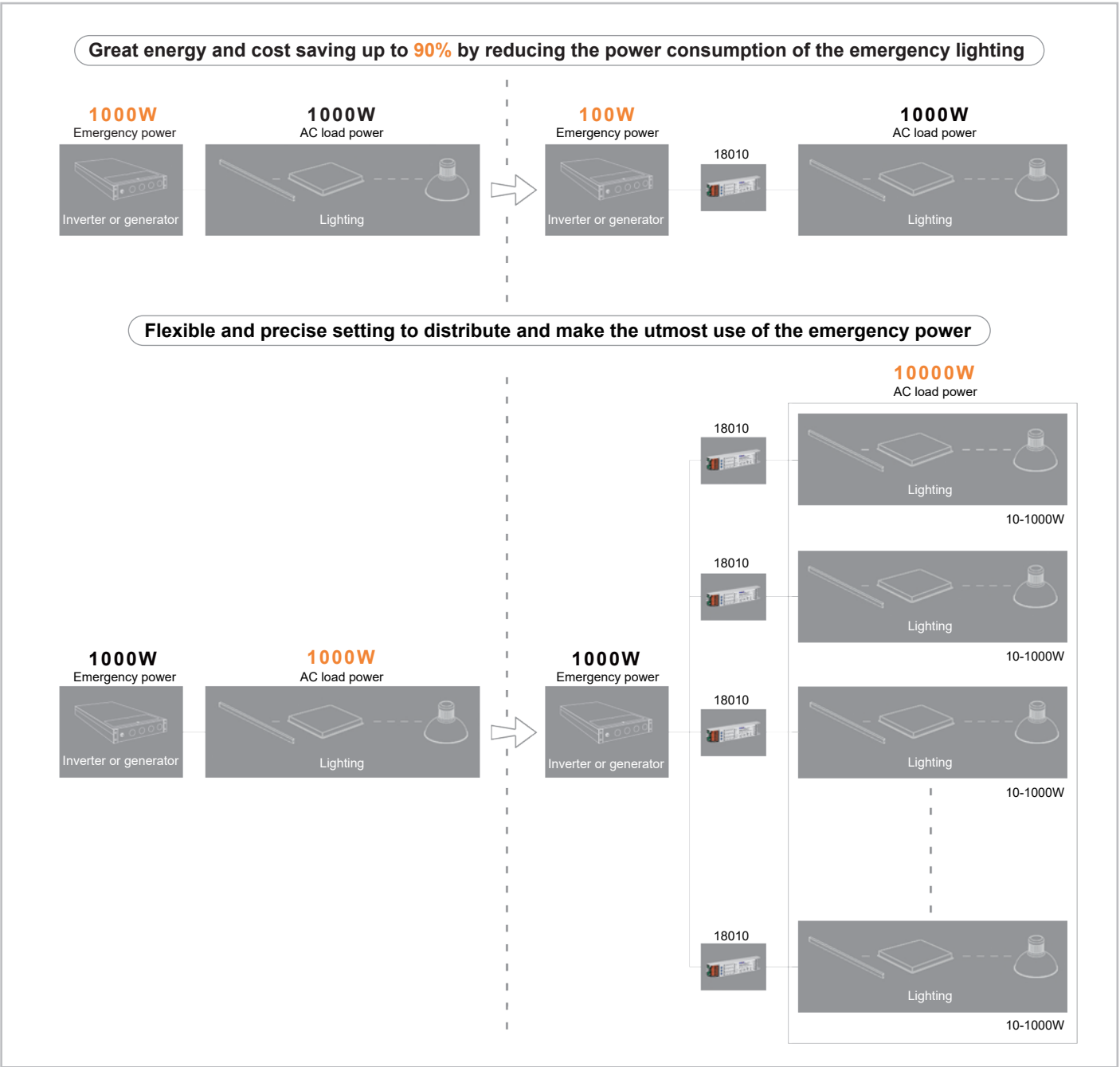


18010-3

Emergency power (P)	
A	1. $P = A \times 100 + B \times 10$ 2. $P = 1000W$ (A=0, B=0)
B	
0-10V Dimming Level (K)	
C	K 0 1 2 ... 9
	K Auto 1V 2V ... 9V

• SMALL BODY BIG VALUE

Patented APD (Auto Preset Dimming) technology allows generator or inverter supplied emergency lighting to work under auto or preset 0-10V dimming level regardless of wall switch position

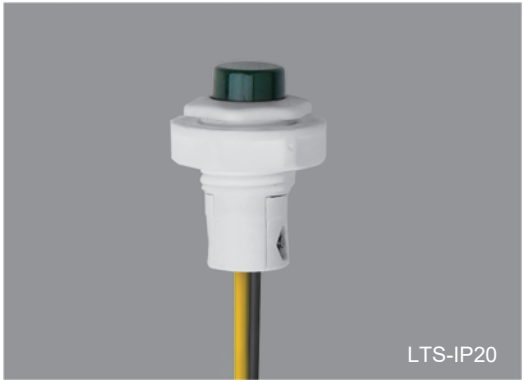
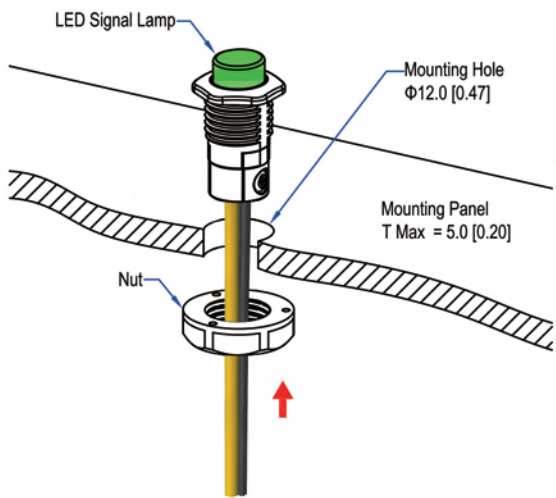


LED TEST SWITCH

LTS

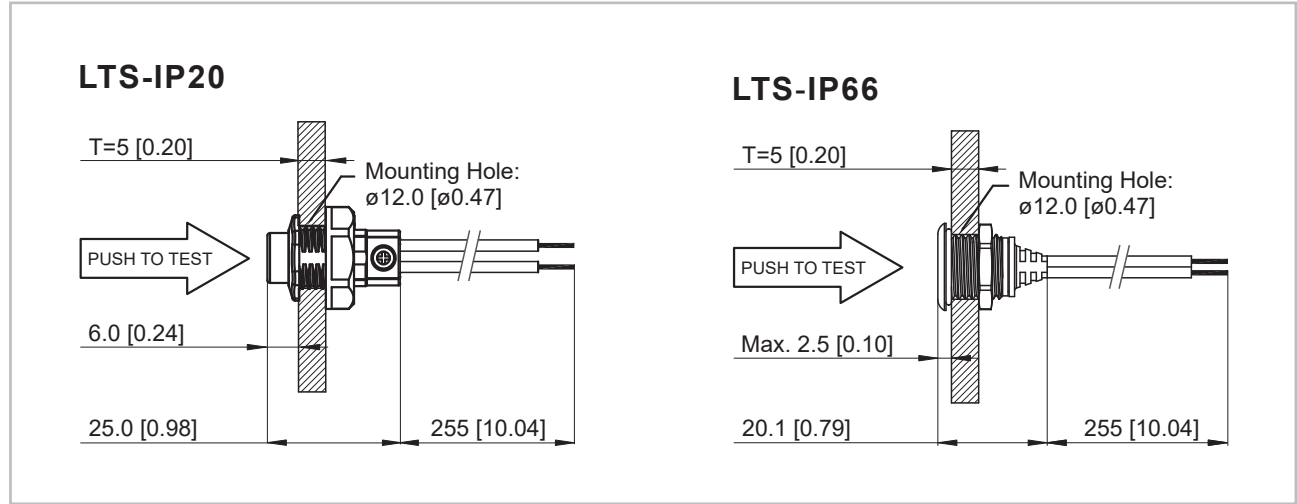
• FEATURES

- 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



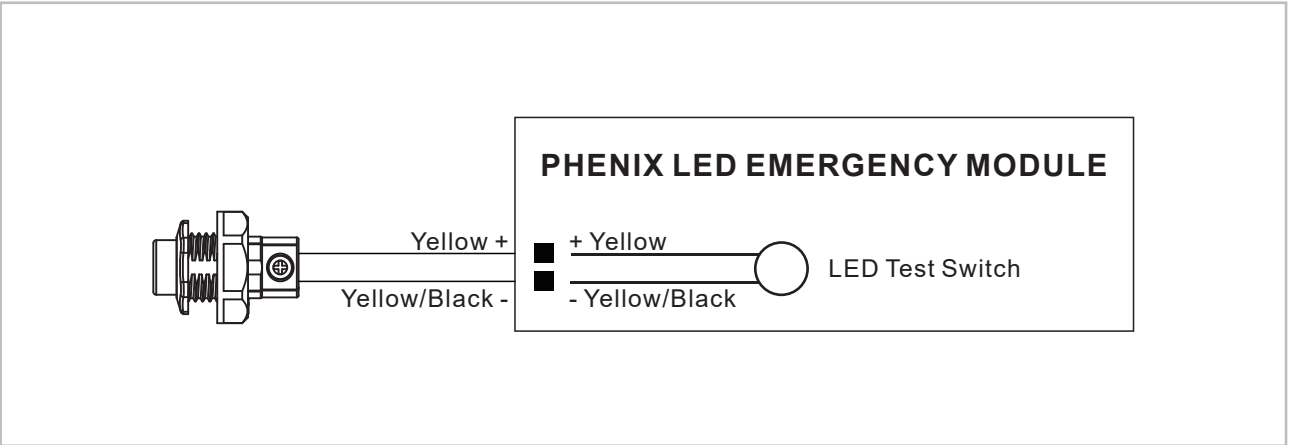
All-metal housing with flexible cable relief, IP66 for outdoor and wet applications

• 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