



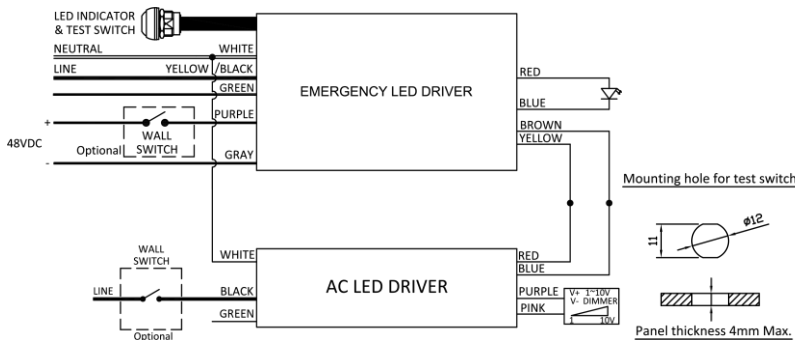
<b>Model Name</b>	EMAC20-55-I48
<b>Output Mode</b>	Constant Current
<b>Input Voltage</b>	120-277 Vac
<b>Input Frequency</b>	50/60 Hz
<b>Dimming</b>	N/A
<b>Surge Rating</b>	3KV
<b>Warranty</b>	5 Years TC $\leq 60^{\circ}\text{C}$ 3 Years TC $\leq 70^{\circ}\text{C}$

## Product Specification



Output Power (W)	Output Voltage (V)	Output Current (mA)	Operating Duration Time	Operating Temp. ( $^{\circ}\text{C}$ )	Battery Voltage (V)	Input Power (W)	Input Current (mA)
Max. 20	15-55	380	Depends on External Power System	0-50	48	Max. 0.95	Max. 14

## Wire Diagram

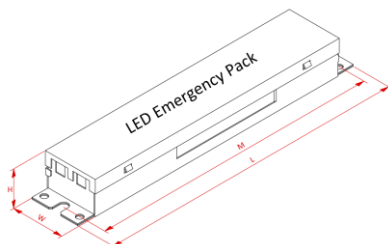


Maximum Wiring Distance (at full load) is 18AWG/18Feet

(Do NOT connect the Green Wires to Ground  
if you are using a Positive +48VDC Ground)

Lead Length	Inch	Cm
White	6	15.2
Yellow/Black	6	15.2
Green	6	15.2
Red	6	15.2
Blue	6	15.2
Yellow	6	15.2
Brown	6	15.2
Purple	6	15.2
Gray	6	15.2
Test Switch	7.08	18
LED Indicator	23.62	60

## Enclosure



AM251

Enclosure	Inch	Cm
Length(L)	9.5	24.1
Width(W)	1.7	4.3
Height(H)	1.16	2.95
Mounting(M)	8.9	22.6



### Input Wiring

Standard

Isolated Pass Relay

Others



### Output Lead Type

Standard

Single Conduit

Dual Conduits

Others




### Test Switch

Type

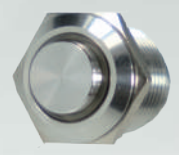
Black & Red

White & Red

White & Translucent

Metal

Image



Red Light

Red Light

Red Light

Red Light

Type

PVC Wire

Fire-Resistant Wire

R-Mount

Customization

Image







### Panel

Type

White

Metal

No Need

Others

Image





## Input Specifications

Parameter	Min.	Typ.	Max.	Notes
Input Voltage	108V	120/277V	305V	
Input Current	-	-	0.014A	@120Vac input with full load
Input Frequency	47Hz	60Hz	63Hz	
Leakage Current	-	-	0.7mA	@277Vac input
Turn On Time	-	-	1.0s	@120Vac input at full load
Hold Up Time	-	-	0.1s	@Nominal input and full load
Efficiency	29%	32%	34%	@55Vdc output at full load
Standby Power	-	-	0.95W	

## Output Specifications

Parameter	Min.	Typ.	Max.	Notes
Output Voltage	15V	-	55V	
Output Current	-	363mA	-	@55Vdc-@15Vdc
No-Load Output Voltage	55V	58V	60V	
Rated Current	344mA	363mA	380mA	
Rated Power	-	20W	-	
Output Current Ripple	-	±10%	-	

## General Specifications

Parameter	Min.	Typ.	Max.	Notes
MTBF	-	100,000 Hours	-	@25°C ambient temperature
Lifespan Time	75,000 Hours	-	-	In the range of specification required by normal use of the power supply at ambient temperature 55°C
Cold Start	-	-	2.0s	@0°C



## Test Switch

### Test Switch Operation

With AC power source alive

1. Push and Hold for 2 seconds, the unit will transfer from charge mode to discharge mode, the indicator is OFF.
2. Release the test switch, the unit will back to charge mode automatically, the indicator is ON.

## Protection

Parameter	Description
Over Voltage	Output current decay mode, recovers automatically after fault condition is removed.
Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.
Over Temperature	Shut down o/p voltage, re-power on to recover.

## Environmental Specifications

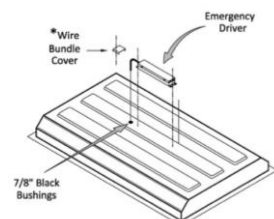
Parameter	Min.	Typ.	Max.	Notes
Operation Temperature	0°C	-	50°C	
Storage Temperature	-20°C	-	55°C	
Humidity	10%	-	90%	
T-Case Temperature	-	-	70°C	

## Safety and EMC Compliance

Safety Standards	Withstand Voltage	Isolation Resistance	EMC Standards	
			EMI	EMS
UL 924 CSA C22.2 No. 141-15	I/P-O/P: 2.0K Vac I/P-FG: 2.0K Vac O/P-FG: 0.5K Vac	I/P-O/P: I/P-FG: O/P-FG: 100Mohm/500VDC	FCC Part 15 class A	FCC Part 15 class A

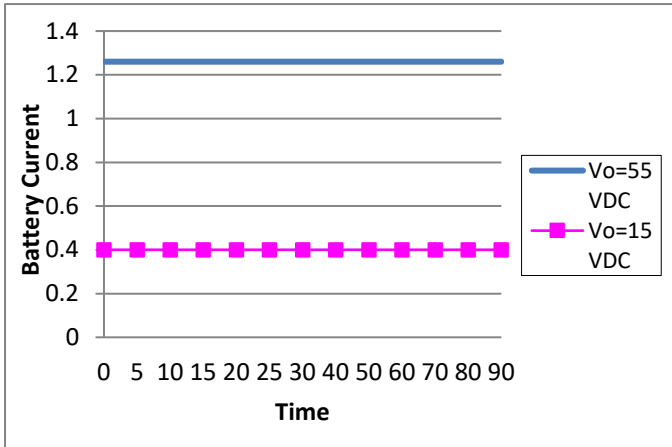
## Note

- The emergency backup driver shall be installed inside an electrical enclosure. If the application requires the emergency pack to be mounted on top of the luminaire please use Model which provides a metal flexible conduit instead of bare wires.

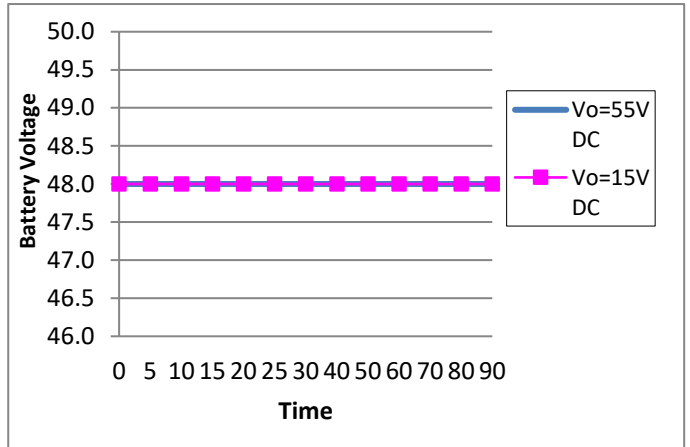




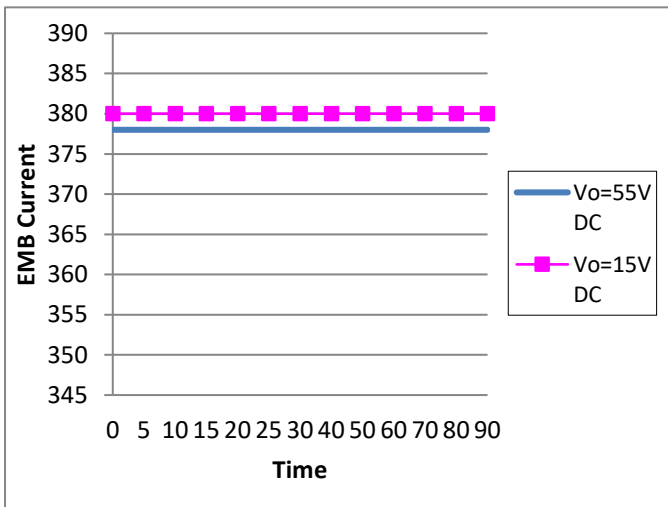
### Battery Current V.S. Time



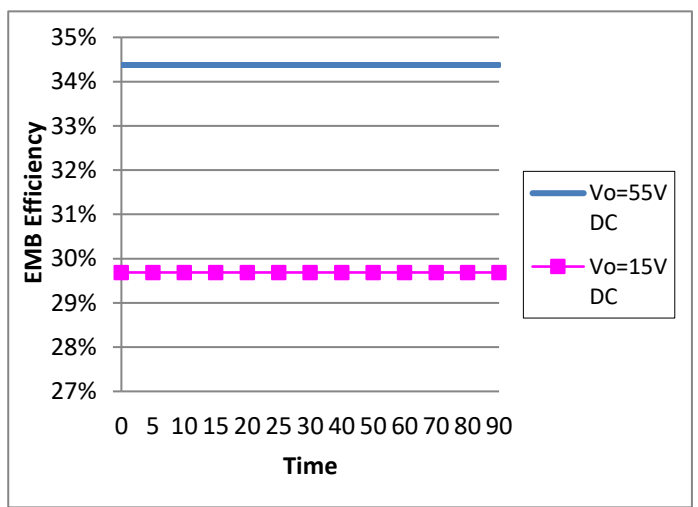
### Battery Voltage V.S. Time



### LED Current V.S. Time



### LED Efficiency V.S. Time



Data is based upon tests performed by Antron Electronics in a controlled environment and representative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.



## Revision History

Change date	Description of Change		
	Item	From	To
2025/08/11	Model name	EMLEDS20-1555-48CHXNB	EMAC20-55-I48