ELEDD MIDI 54L

LiFePO4 Emergency Conversion Solutions

ELEDD MIDI 54L 3W 9006245
3W 3H LED Emergency Driver LiFePO4

- SW.L OUT
- SW.L IN
- UNSWL
- N
- SELV
- EL

220-240V~50/60Hz   LED Output: 6-54V   3.2V 4.5Ah LiFePO4
λ=0.7C Iemergency: 60 - 500mA tc: +75°C
Prated: 3W   ta: 0°C...+55°C
U-OUT=54V Open Circuit Voltage: 60V Max

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- Power +
- LED Driver
- LED Indicator +
- LED Indicator -
- LED Lamp +
- LED Lamp -
- TDx
- TD1
- Battery +
- Battery -
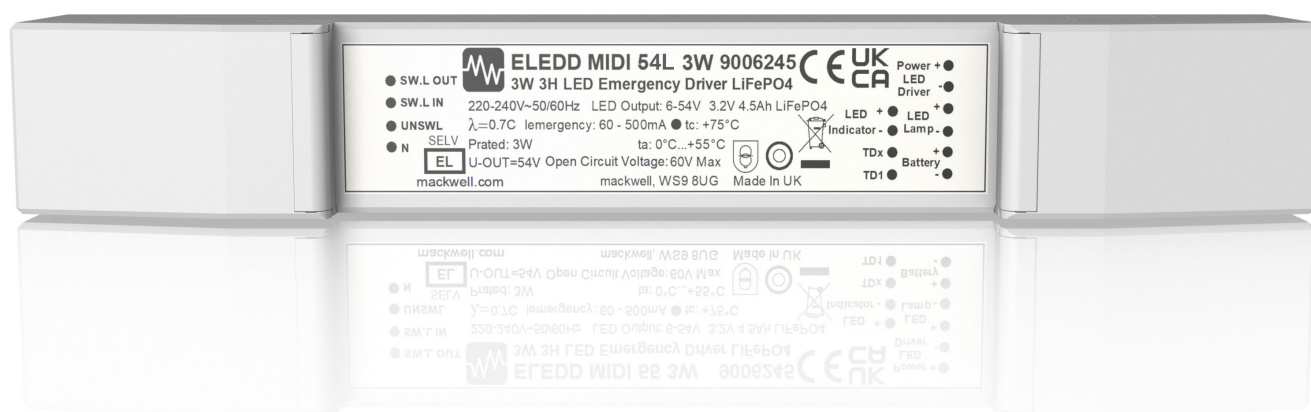
Images are for illustrative purposes only

ELEDD MIDI 54L

- Deep Discharge Protection
- 3 Hours
- SELV
- Auto-detect Battery & LED Load
- LiFePO4
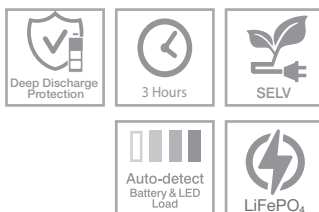
LiFePO4 Emergency Conversion Solutions for LED Loads

Compact LiFePO4 Emergency Conversion Solutions

The ELEDD MIDI 54L range of LED lithium emergency drivers have been designed to enable conversion of general lighting for emergency operation.

The range comprises pre-wired kits containing a driver, a battery, the battery mounting accessories, and LED indicator. All components are also available to order individually.

Each variant has controlled current SELV compliant outputs, suitable for driving multiple power LEDs or multi-chip LED arrays with forward voltages (Vf) of 6V to 54V, and built-in adaptability that allows for optimum output current based on the forward voltage of the specific light engine for a more precise match to the controlled LED scheme. The range includes options for standard and DALI-2* technology to drive 3-hour rated emergency duration.

Key features:

- Fully kitted conversion packs
- Self-contained emergency lighting LED driver
- DALI-2* level interoperability
- Compatible with LED modules with a forward voltage 6-54V
- Low profile casing with optional strain relief kit
- Constant power output
- Deep discharge protection
- Intelligent battery management
- 3-hour rated emergency duration
- SELV output

UKCA   CE   ICEL

MADE IN BRITAIN®   DALI

MW mackwell®
emergency lighting

ELEDD MIDI 54L

Lithium Emergency Conversion Solutions

Dimensions
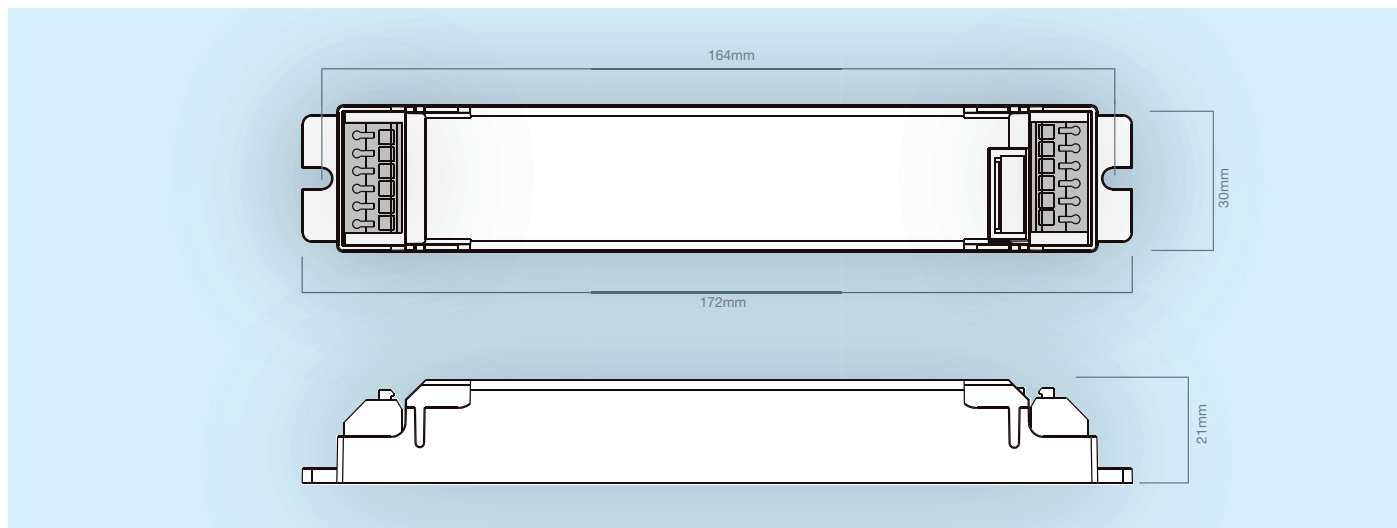
Driver Specification

Supply voltage	:	220 - 240 V
Supply frequency	:	50/60 Hz
Supply current max	:	40 mA
Power factor	:	0.7
Input power	:	3.5 - 4.0 W
Output voltage	:	6 - 54V
LED current		
2.3 W	:	40 - 440 mA
3 W	:	45 - 600 mA
4 W	:	70 - 840 mA
Ambient temperature (ta)	:	0°C to +55°C
Max case temperature (tc)	:	+65°C
Conductor size	:	0.5 to 0.75mm^2
Battery charge voltage	:	3.4 - 3.6 V
Battery discharge voltage	:	2.8 - 3.6 V
Emergency LED Power	:	2.3 W / 3W / 4 W
Response time	:	< 500 ms
Emergency duration	:	3 hours
Initial charge period	:	24 hours
Maximum recharge	:	16 hours
Weight of control gear	:	72g

Relevant Standards

EN 61347-2-7
EN 61347-2-13
EN 60598-2-22
BS 5266-1
EN 62034
EN 62386
EN 62384
ICEL 1004
EN 55015
EN 61000-3-2
EN 61000-3-3
EN 61547

Batteries

ELEDD MIDI 54L is available with a range of LiFePO$_4$ rechargeable battery options. For 1 hour emergency operation, please contact Mackwell for further details.

Features

Battery Charge Management applies an intermittent charging duty cycle designed for use with LiFePO$_4$ batteries. This provides energy efficient charging maintenance, reduced operating temperatures and optimum service life of LiFePO$_4$ batteries.

Technology Options

Standard

For applications where self-testing is not required or suitable, the non-AutoTest® option provides the same quality and performance expected of Mackwell products, without the AutoTest® feature.

DALI & DALI-2*

DALI provides benefits by enabling testing and monitoring of an emergency lighting system via a standardised protocol, either on-site or via an internet connection. DALI is ideal for monitoring larger buildings and multiple sites. DALI-2 is the new generation of the standard that has now been extended to include emergency lighting. This improves interoperability and in future will introduce sophisticated diagnostic capabilities. All DALI products default to standalone AutoTest when not connected to a DALI network.
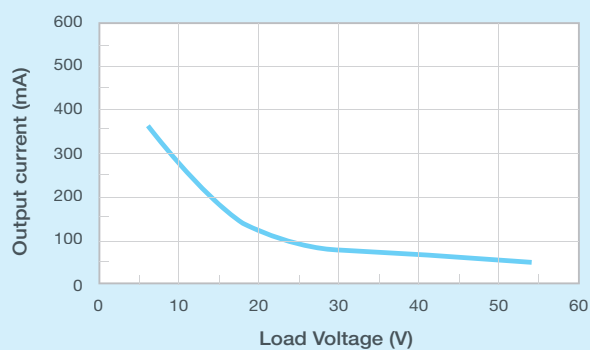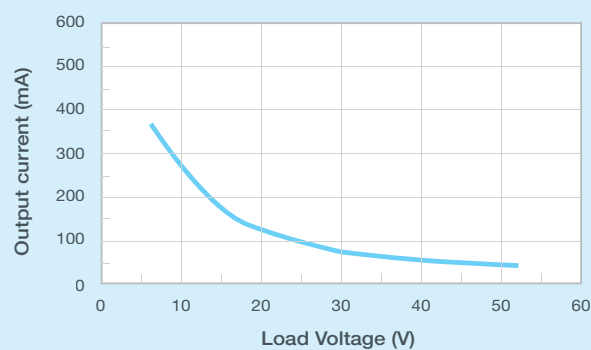
ELEDD MIDI 54L
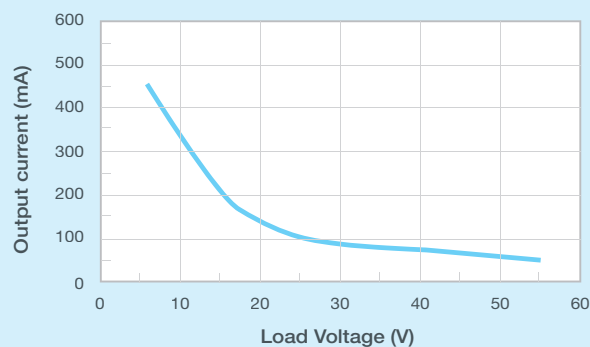
Lithium Emergency Conversion Solutions

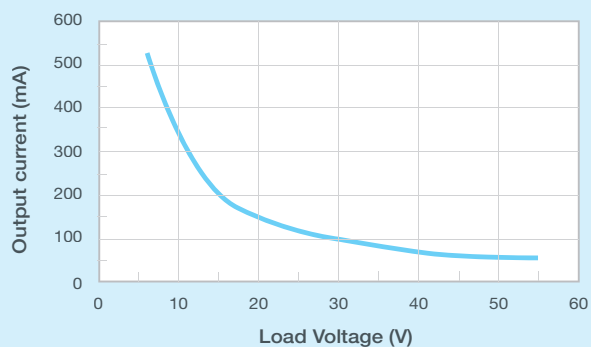## Output Current

2.3W ELEDD MIDI 54L - STANDARD

2.3W ELEDD MIDI 54L - DALI
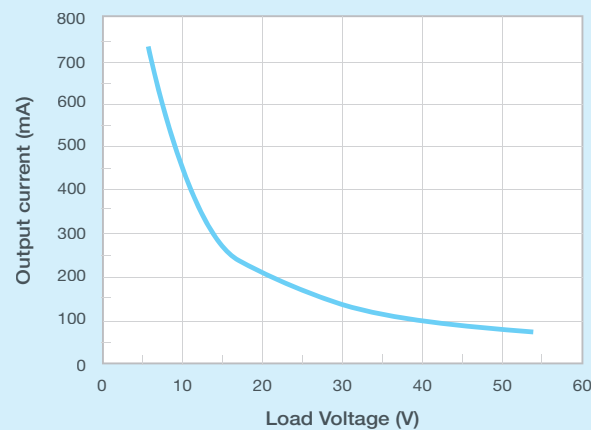

3W ELEDD MIDI 54L - STANDARD

3W ELEDD MIDI 54L - DALI

4W ELEDD MIDI 54L - STANDARD
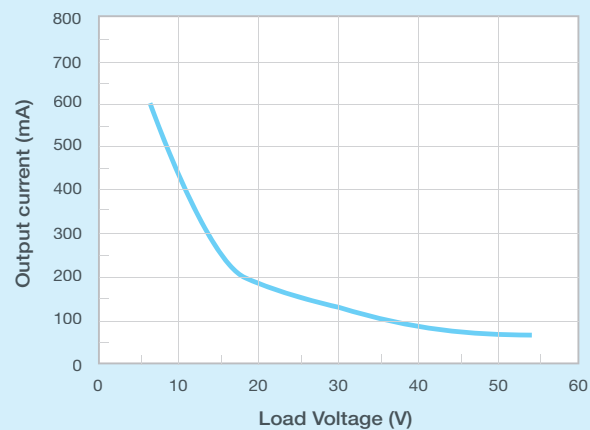
4W ELEDD MIDI 54L - DALI
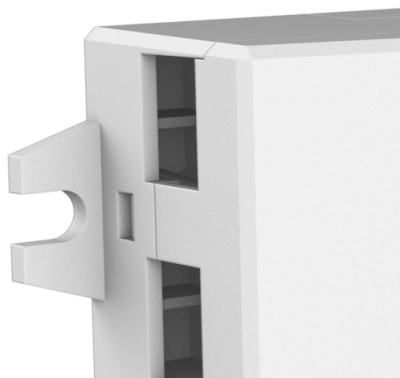

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emergency lighting

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Battery compatibility chart

Technology	Type	Article Number	LiFePO$_4$ 3.6Ah 1C 26650 9006579 (IFpR 26/65/E)	LiFePO$_4$ 4.5Ah 3C 18650 9006249 (IFpR 19/66/E)	LiFePO$_4$ 7.2Ah 2C 26650 9006580 (IFpR 26/65/E)
Standard	2.3W	9006571	●		
	3 W	9006245		●	
	4 W	9006575			●
DALI	2.3 W	9006573	●		
	3 W	9006247		●	
	4 W	9006577			●

ELEDD MIDI 54L

Lithium Emergency Conversion Solutions

Order codes

Standard Conversion Kits**

Order Code	Description
9006539	ELEDD MIDI 54V 2.3W LiFePO$_4$ 3H Conversion Kit
9006551	ELEDD MIDI 54V 3W LiFePO$_4$ 3H Conversion Kit
9006559	ELEDD MIDI 54V 4W LiFePO$_4$ 3H Conversion Kit

DALI/DALI-2* Conversion Kits**

Order Code	Description
9006545	ELEDD MIDI 54V 2.3W LiFePO$_4$ 3H Conversion Kit
9006555	ELEDD MIDI 54V 3W LiFePO$_4$ 3H Conversion Kit
9006565	ELEDD MIDI 54V 4W LiFePO$_4$ 3H Conversion Kit

Standard

Order Code	Description
9006571	ELEDD MIDI 54V 2.3W LiFePO$_4$ 3H
9006245	ELEDD MIDI 54V 3W LiFePO$_4$ 3H
9006575	ELEDD MIDI 54V 4W LiFePO$_4$ 3H

DALI/DALI-2*

Order Code	Description
9006573	ELEDD MIDI 54V 2.3W LiFePO$_4$ 3H
9006247	ELEDD MIDI 54V 3W LiFePO$_4$ 3H
9006577	ELEDD MIDI 54V 4W LiFePO$_4$ 3H

Batteries

Order Code	Description
9006579	Battery LiFePO$_4$ 3.6Ah Single Cell 26650 with Mounting Accessory
9006249	Battery LiFePO$_4$ 4.5Ah 3 Cell 18650 Stick with Mounting Accessory
9006580	Battery LiFePO$_4$ 7.2Ah 2 Cell 26650 Stick with Mounting Accessory

LED Indicators

Order Code	Description
9006250	450mm Diffused Green LED - Standard
9006251	450mm Diffused Bi-Colour LED - DALI

Spares & Accessories

Order Code	Description
9006530	Driver Terminal Cover / Strain Relief Kit

Other variants may be available on request. Contact your Mackwell sales representative for further information.

** Conversion Kits contain a driver, a battery with mounting accessory and LED indicator as standard.

* DALI variants are available now. The DALI-2 versions are currently under development.

Mackwell maintains a policy of continuous development and reserves the right to change the details shown on this data sheet without prior notice.

The contents are intended for guidance only.