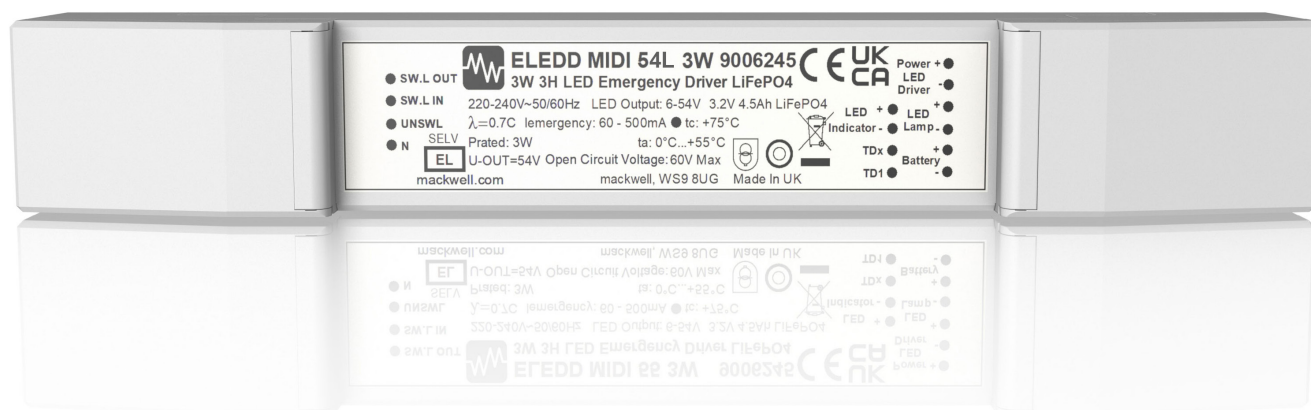


ELEDD MIDI 54L

LiFePO₄ Emergency Conversion Solutions



Images are for illustrative purposes only

ELEDD MIDI 54L



LiFePO₄ Emergency
Conversion Solutions
for LED Loads



mackwell
emergency lighting

Compact LiFePO₄ Emergency Conversion Solutions

The ELEDD MIDI 54L range of LED lithium emergency drivers have been designed to enable simple 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 outputs, suitable for driving multiple powerLEDs 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 1, 2 or 3-hour rated emergency duration

Key features:

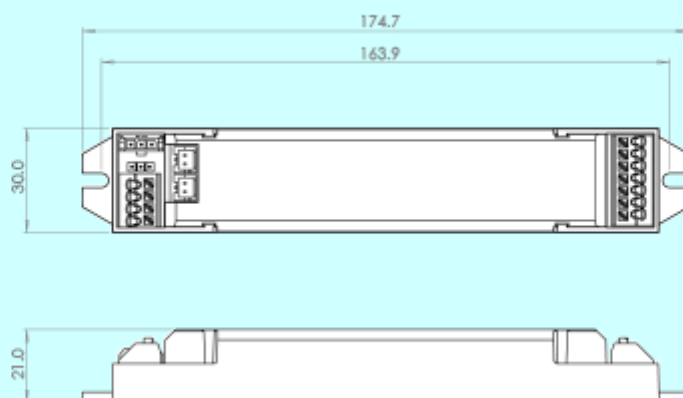
- Fully kitted or pre-wired conversion packs
- Self-contained emergency lighting LED driver
- DALI-2 level interoperability
- Compatible with LED modules with a forward voltage 6-54V
- Low profile casing with optional strain relief kit
- Constant power output
- Deep discharge protection
- Intelligent battery management
- Switchable 1, 2 or 3 hour emergency duration
- 6 year standard warranty



ELEDD MIDI 54L

Lithium Emergency Conversion Solutions

Dimensions



Driver Specification

Supply voltage	:	220 - 240 V
Supply frequency	:	50 / 60 Hz
Supply current max	:	30 - 35 mA
Power factor	:	0.65
Input power	:	3.5 - 4.5 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)	:	+70°C
Conductor size	:	0.5 to 1.5mm 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	:	1 / 2 / 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 LiFePO₄ rechargeable battery options.

Features

Battery Charge Management applies an intermittent charging duty cycle designed for use with LiFePO₄ batteries. This provides energy efficient charging maintenance, reduced operating temperatures and optimum service life of LiFePO₄ 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-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.

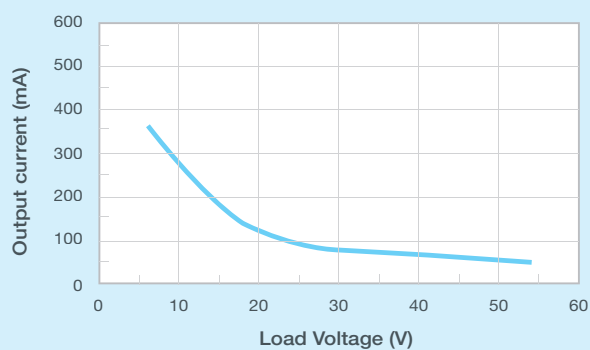


ELEDD MIDI 54L

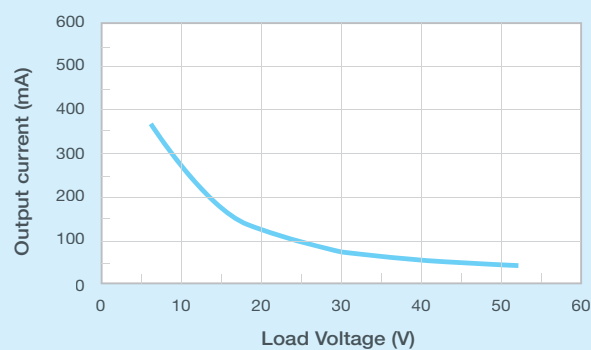
Lithium Emergency Conversion Solutions

Output Current

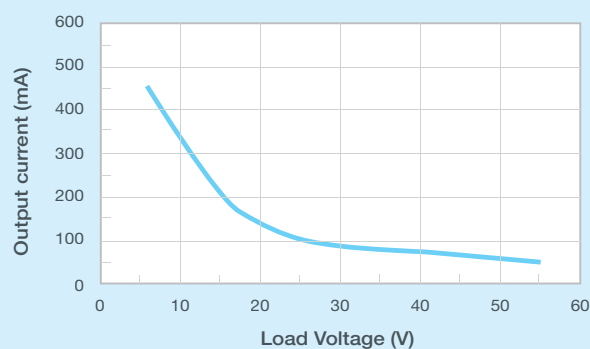
2.3W ELEDD MIDI 54L - STANDARD



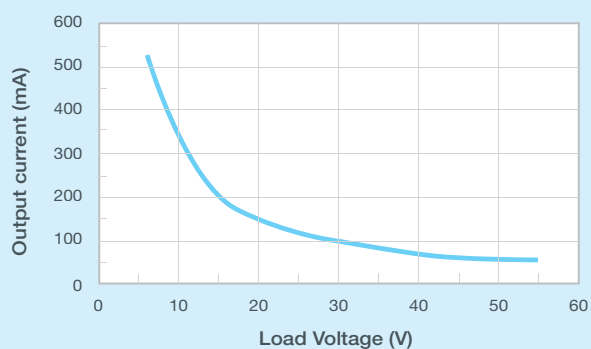
2.3W ELEDD MIDI 54L - DALI



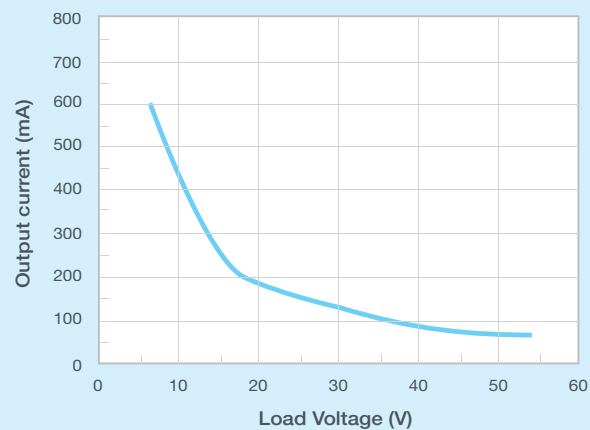
3W ELEDD MIDI 54L - STANDARD



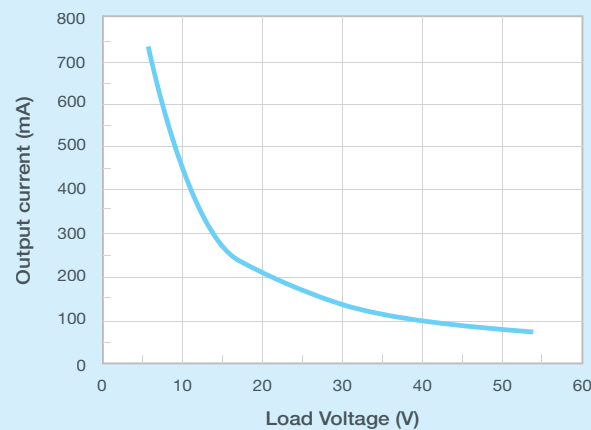
3W ELEDD MIDI 54L - DALI



4W ELEDD MIDI 54L - STANDARD



4W ELEDD MIDI 54L - DALI



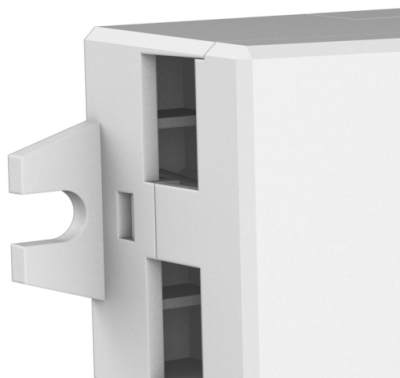


ELEDD MIDI 54L

Lithium Emergency Conversion Solutions

Battery compatibility chart

Technology	Type	LiFePO4 3.6Ah 1C 26650 9006579 (IFpR 26/65/E)	LiFePO4 4.5Ah 3C 18650 9006249 (IFpR 19/66/E)	LiFePO4 7.2Ah 2C 26650 9006580 (IFpR 26/65/E)
Standard	2.3 W	●		
	3 W		●	
	4 W			●
DALI	2.3 W	●		
	3 W		●	
	4 W			●



ELEDD MIDI 54L

Lithium Emergency Conversion Solutions

Order codes

Standard Conversion Kits**

Order Code	Description
9006772	ELEDD MIDI 54V 2.3W LiFePO ₄ 3H Conversion Kit
9006774	ELEDD MIDI 54V 3W LiFePO ₄ 3H Conversion Kit
9006780	ELEDD MIDI 54V 4W LiFePO ₄ 3H Conversion Kit
9006800	ELEDD MIDI 54V 2.3W LiFePO ₄ 3H Conversion Kit with 1m Indicator
9006802	ELEDD MIDI 54V 3W LiFePO ₄ 3H Conversion Kit with 1m Indicator
9006804	ELEDD MIDI 54V 4W LiFePO ₄ 3H Conversion Kit with 1m Indicator

DALI-2 Conversion Kits**

Order Code	Description
9006773	ELEDD MIDI 54V 2.3W LiFePO ₄ 3H Conversion Kit
9006775	ELEDD MIDI 54V 3W LiFePO ₄ 3H Conversion Kit
9006781	ELEDD MIDI 54V 4W LiFePO ₄ 3H Conversion Kit
9006801	ELEDD MIDI 54V 2.3W LiFePO ₄ 3H Conversion Kit with 1m Indicator
9006803	ELEDD MIDI 54V 3W LiFePO ₄ 3H Conversion Kit with 1m Indicator
9006805	ELEDD MIDI 54V 4W LiFePO ₄ 3H Conversion Kit with 1m Indicator

Standard

Order Code	Description
9007055	ELEDD MIDI 54V 2.3W LiFePO ₄ 3H
9007059	ELEDD MIDI 54V 3W LiFePO ₄ 3H
9007063	ELEDD MIDI 54V 4W LiFePO ₄ 3H

DALI-2

Order Code	Description
9007057	ELEDD MIDI 54V 2.3W LiFePO ₄ 3H
9007061	ELEDD MIDI 54V 3W LiFePO ₄ 3H
9007065	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
9006812	500mm Bi-Colour LED Indicator
9006813	1000mm Bi-Colour LED Indicator

Spares & Accessories

Order Code	Description
9006814	500mm Test Switch

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 500mm LED indicator as standard.

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.



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Mackwell, Vigo Place, Aldridge,
West Midlands WS9 8UG.
Tel. +44 (0) 1922 458 255
Company Reg No: 1414873.
VAT Reg No GB330230618

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