

CliQ M Battery Module (without Battery)

DRN-24V7AAEN



Highlights & Features

- Anti-Corrosion Powder Coated Chassis
- Suitable for 7.2 AH Lead-Acid Battery
- 2 x 12 V battery in series
- Built-in battery voltage LED indicator
- Built-in battery over temperature protection (need to be used with the CliQ M DC-UPS modules)

Safety Standards



Model Number:	DRN-24V7AAEN
Unit Weight:	1.40 kg (3.09 lb)
Dimensions (L x W x D):	211.5 x 148 x 109.2 mm (8.33 x 5.83 x 4.30 inch)

General Description

The CliQ M battery module is designed to support 2 x 12 V 7.2 AH lead-acid battery in series for 24 V system. There is a built-in battery voltage LED indicator to easily monitor the battery status while in operation. When used together with the CliQ M DC-UPS modules, users can also monitor the battery temperature to prevent the lead-acid battery from over charging and overheating to extend battery life.

Model Information

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Model Number	Nominal Voltage	Charging Current	Discharging Current
DRN-24V7AAEN	24 Vdc typ.	2.1 A Max	40 A Max

Model Numbering

DR	N –	24V	□A	A	E	N
DIN Rail	Battery Module (Without Battery)	Input / Output Voltage	Capacity 7A – 7.2 AH	Metal Frame	Lead Acid Battery	Without Class I, Div 2

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Specifications

Battery Characteristics

Nominal Battery Voltage	24 Vdc, SLA Sealed lead acid battery 2 x 12 Vdc, SLA Sealed lead acid battery in series
Battery Capability	7.2 AH lead-acid battery
Recommended Charging Voltage	27.6 Vdc
Expected Float Use Life	3~5 years (Eurobat 20°C)

Battery Current Ratings / Characteristics

Charging Current*1	2.1 A Max
Discharging Current	40 A Max
Battery Fuse	2 pcs in parallel, LITTELFUSE 0257030.PXAPC & BUSSMANN ATC-30 or equivalent

*1: Cannot exceed max charging current limitation of battery specification.

Mechanical

Case Chassis	Metal	
Dimensions (L x W x D)	211.5 x 148 x 109.2 mm (8.33 x 5.83 x 4.30 inch)	
Unit Weight	1.40 kg (3.09 lb)	
Cooling System	Convection	
Terminal	Battery (CN203)	2 Pins
	Temperature Sensor & Rx/Tx (CN206)	4 Pins Power Supply Header: CVILUX CP3504P1H00-NH Mating Connector: CVILUX CP3504S0010 Terminal: CVILUX CP35TN21PES
Wire	Battery	AWG 10-6 (Load: 0-20 A) AWG 8-6 (Load: 20-40 A)

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Environment

Surrounding Air Temperature	Charging	0°C to +40°C
	Discharging	-10°C to +50°C
	Storage	-15°C to +40°C
Operating Humidity	5 to 95% RH (Non-Condensing)	
Operating Altitude	0 to 6000 m	
Shock Test	Non-Operating	IEC 60068-2-27, 30 G (300 m/s ²) for a duration of 18 ms, 1 time per direction, 2 times in total
Vibration	Non-Operating	IEC 60068-2-6, 10 Hz to 500 Hz @ 30 m/s ² (3 G peak); 60 min per axis for all X, Y, Z direction
Pollution Degree	2	

Protections

Internal Fuse	30 A
Degree of Protection	IP00
Protection Against Shock	Class III

Safety Standards / Directives

CE	In conformance with EMC Directive 2014/30/EU and Low Voltage Directive 2014/35/EU
UKCA	In conformance with Electromagnetic Compatibility Regulations 2016 and Electrical Equipment (Safety) Regulations 2016

EMC

Emissions (CE & RE)	EN 61000-6-4
Immunity	EN 61000-6-2

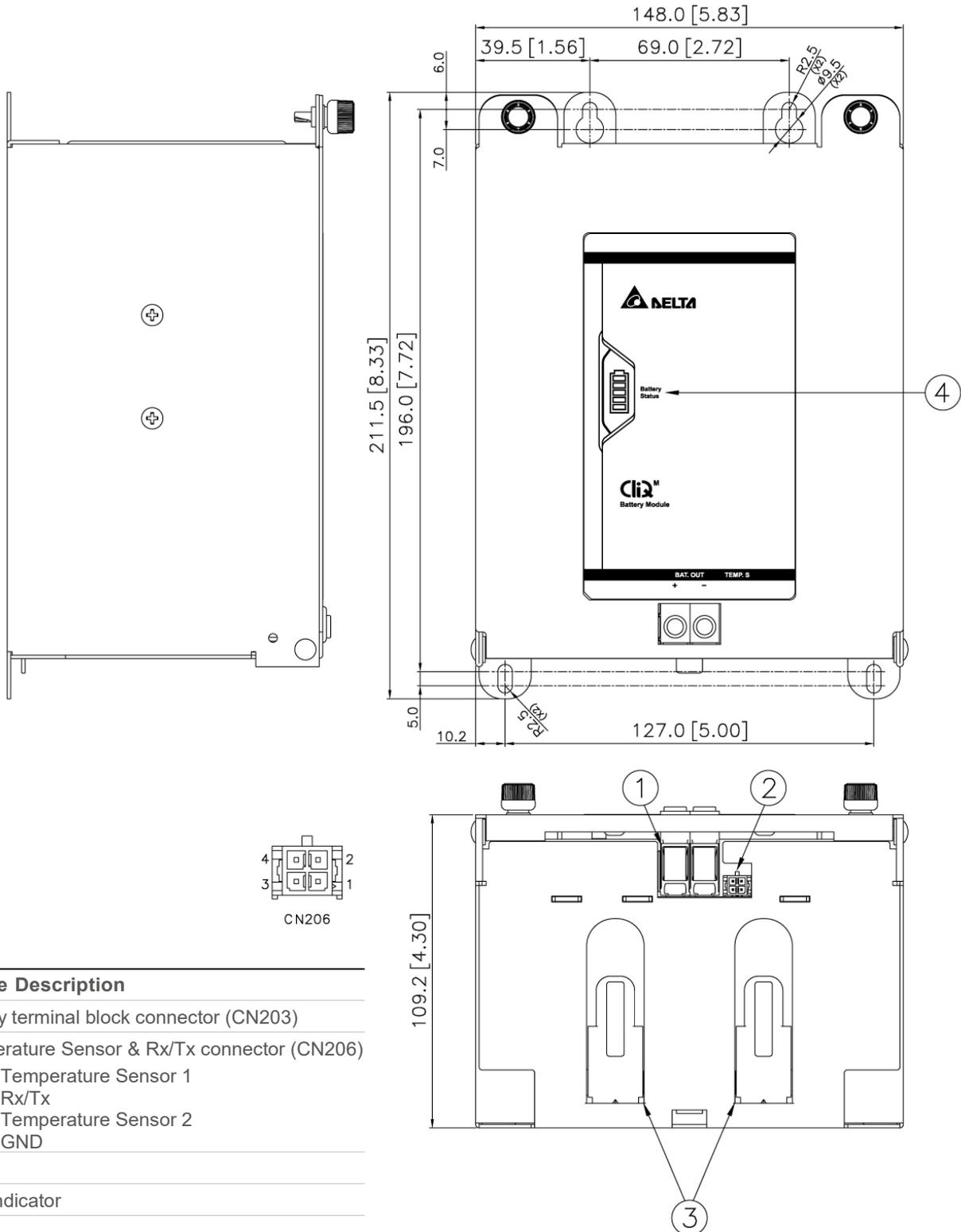
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Dimensions

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L x W x D: 211.5 x 148 x 109.2 mm (8.33 x 5.83 x 4.30 inch)



Item	Device Description
1	Battery terminal block connector (CN203)
2	Temperature Sensor & Rx/Tx connector (CN206) Pin 1: Temperature Sensor 1 Pin 2: Rx/Tx Pin 3: Temperature Sensor 2 Pin 4: GND
3	Hook
4	LED indicator

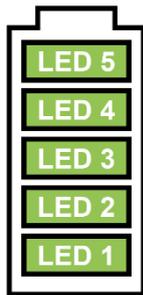
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AWG Wire Table

Current Rating for PVC Wire	
6 AWG	52.5 A
8 AWG	37.5 A
10 AWG	29.0 A
12 AWG	22.5 A
14 AWG	16.5 A
16 AWG	12.0 A
18 AWG	9.0 A
20 AWG	6.5 A
22 AWG	5.0 A
24 AWG	3.5 A
26 AWG	2.5 A
28 AWG	2.0 A
30 AWG	1.5 A

LED Indicator



Battery Status

Battery Capacity	LED 1	LED 2	LED 3	LED 4	LED 5
> 85%	ON	ON	ON	ON	ON
70%-85%	ON	ON	ON	ON	OFF
55%-70%	ON	ON	ON	OFF	OFF
40%-55%	ON	ON	OFF	OFF	OFF
20%-40%	ON	OFF	OFF	OFF	OFF
< 20%	OFF	OFF	OFF	OFF	OFF

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Assembly & Installation

With reference to Fig. 1, the battery module should be mounted on a sturdy surface with minimum of 2 mounting holes using M4 screws. For Vertical Mounting, the device should be installed with Battery terminal block on the bottom.

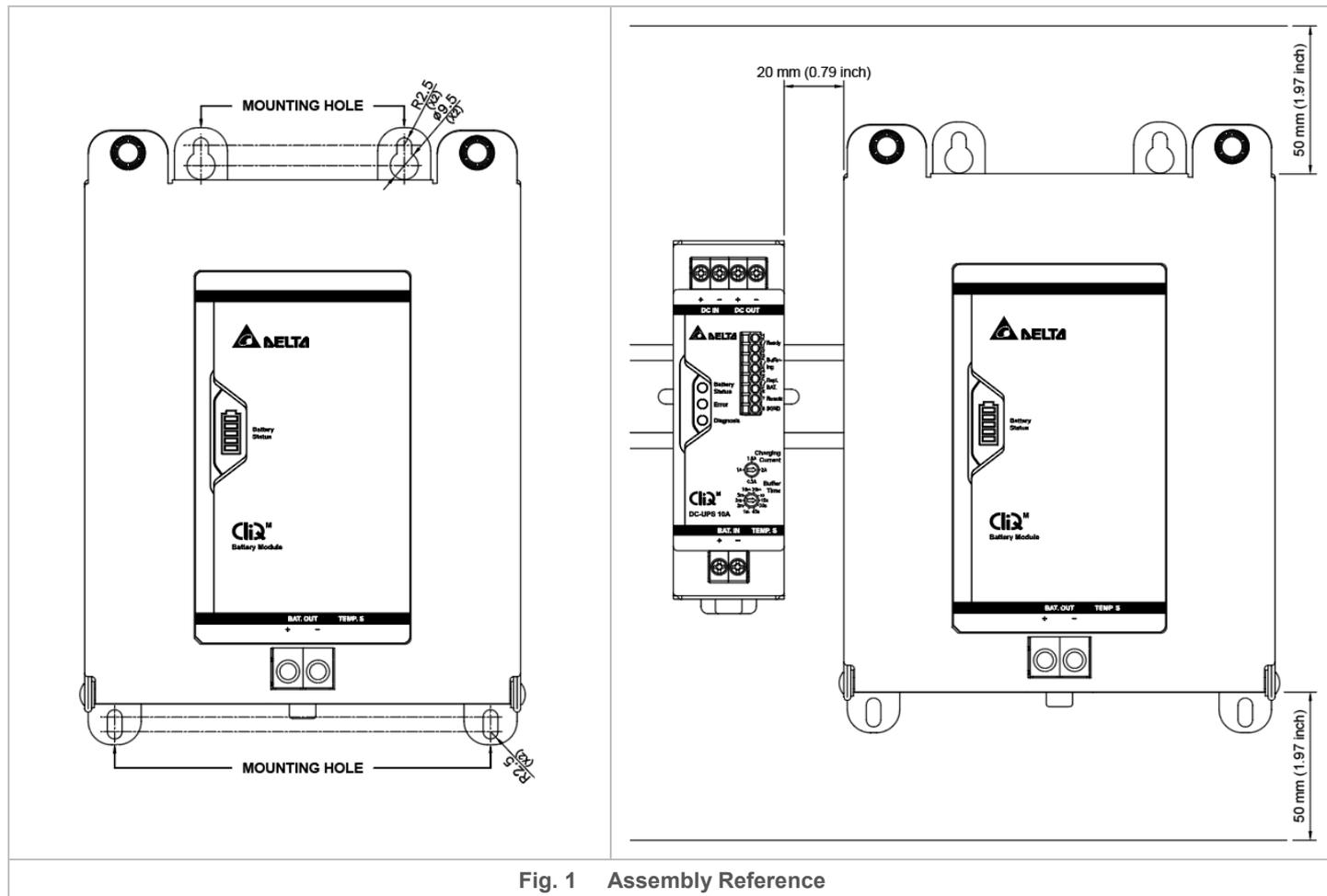


Fig. 1 Assembly Reference

Safety Instructions

- When replacing batteries, only use the same type of batteries listed under the “Battery Characteristics” section on Page 2.
- Proper disposal of batteries is required. Refer to the relevant local codes for disposal requirements.
- ALWAYS switch mains of input power OFF before connecting and disconnecting the input voltage to the unit. If mains are not turned OFF, there is risk of explosion / severe damage.
- **To guarantee sufficient convection cooling, keep a distance of 50 mm (1.97 inch) above and below the device as well as a lateral distance of 20 mm (0.79 inch) to other units.**
- Note that the enclosure of the device can become very hot depending on the surrounding air temperature and load of the power supply. Risk of burns!
- The main power must be turned off before connecting or disconnecting wires to the terminals!
- DO NOT insert any objects into the unit.
- Hazardous voltages may be present for up to 5 minutes after the input mains voltage is disconnected. Do not touch the unit during this time.
- The unit is a built-in unit and must be installed in a cabinet or room (condensation free environment and indoor location) that is relatively free of conductive contaminants.

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Others

Attention

Delta provides all information in the datasheets on an "AS IS" basis and does not offer any kind of warranty through the information for using the product. In the event of any discrepancy between the information in the catalog and datasheets, the datasheets shall prevail (please refer to www.DeltaPSU.com for the latest datasheets information). Delta shall have no liability of indemnification for any claim or action arising from any error for the provided information in the datasheets. Customer shall take its responsibility for evaluation of using the product before placing an order with Delta.

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