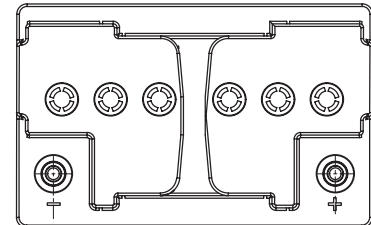
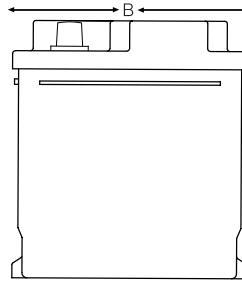
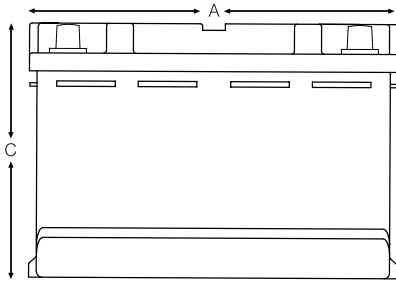


# EQ-48/H7

## Carbon Nano Gel Bloc



Left - Negative

Right - Positive

### Electrical Specifications

<b>Voltage</b>	12V
<b>M.R.C. 25 Amps</b>	100
<b>80% DOD Voltage Cutoff</b>	11.2V
<b>Low Voltage Cutoff</b>	10.8V
<b>Self Discharge</b>	Less than 3% per month (20°C/68°F)
<b>Charge Temperature</b>	Min: -10°C (14°F) / Max: 50°C (122°F)
<b>Discharge Temperature**</b>	Min: -40°C (-40°F) / Max: 50°C (122°F)
<b>Storage</b>	Min: -20°C (-4°F) / Max: 60°C (140°F)

Cell Type Ue (100%) / VPC Ref Temp	C5 1.70 25°C	C10 1.75 25°C	C20 1.75 25°C	C100 1.80 25°C
EQ-48/H7	51	54	56	58

\*\* CAUTION: Depths of discharge, operating voltages and currents, when designing systems for use at maximum temperatures, will vary.

### Mechanical Specifications

Industry Reference	L3	
<b>Length (A)</b>	11 in	277 mm
<b>Width (B)</b>	6.9 in	175 mm
<b>Height (C)</b>	7.5 in	190 mm
<b>Weight</b>	46.96 lbs	21.30 kgs
<b>Terminal (Opt'l)*</b>	A-POLE	
<b>Cell(s)</b>	6	
<b>Electrolyte</b>	Gel	
<b>Terminal Torque Nm</b>	n/a	

NOTE: There is a tolerance of +/-2%.

### Features

- Maintenance free - no topping up required

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- Ultra energy efficient due to low resistance

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- Reduced operating temperatures for increased cycle life (>1500 cycles) and battery lifetime

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- Cost savings due to increased efficiency

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- Up to 2 x faster recharge

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- Increased design life from 12 to 15 years

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- Allows for opportunity charging to give you those extra running times when required

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- Suitable for extreme temperature variants

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### Applications: all motive, leisure & solar:

- Electric vehicles, including cleaning machines

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- Wheelchairs

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- Electric Working Platforms

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- UPS Systems

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- Traffic Systems

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- Telecommunications & Emergency Lighting

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- Caravans / Motorhomes RV's & Maritime

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- Solar & Renewable Energy & Home Invertor

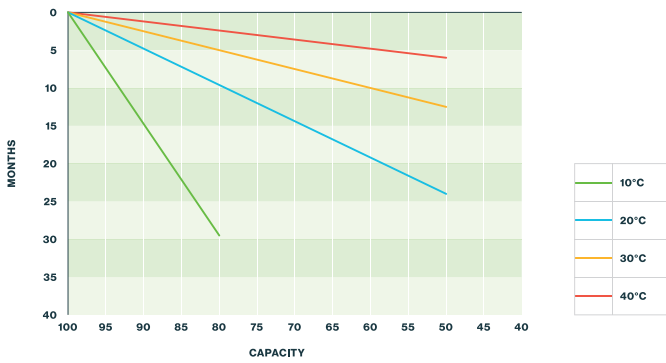
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## Charging profile

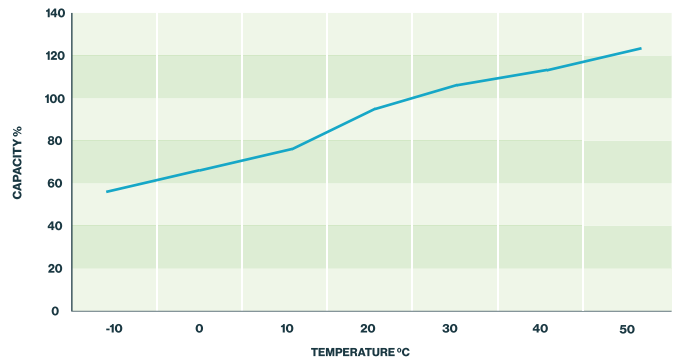
**IU Charging** I = min. 12% C<sub>5</sub> max. 30% C<sub>5</sub>  
U = 2.4 V per cell

**IUI Charging** I<sub>1</sub> = min. 12% C<sub>5</sub> max. 40% C<sub>5</sub>  
U = 2.35 V per cell  
I<sub>2</sub> = 1.5% C<sub>5</sub> for max. 4 hours

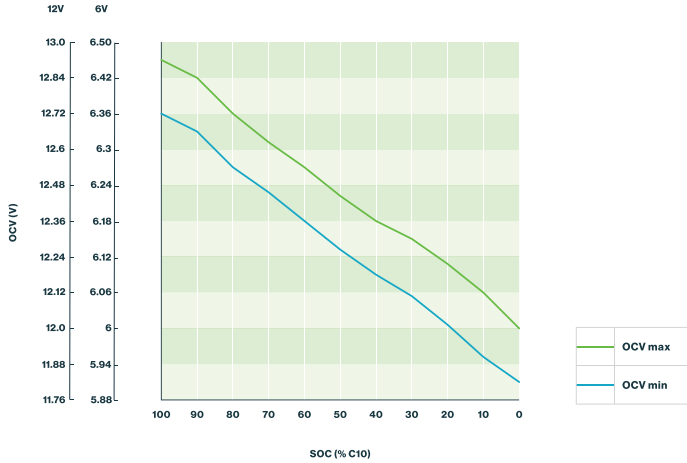
### Self discharge at different temperatures



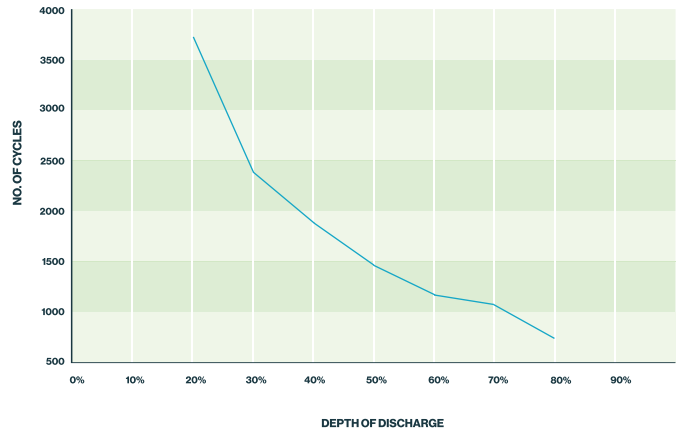
### Capacity vs. temperature



### Storage: Determine the state of charge



### Cycle life vs. depth of discharge (25°C)



### Relation between charging, voltage and temperature

