



<b>AGM Battery Charging</b>		
<b>STAGE</b>	<b>END CONDITIONS</b>	<b>ERROR</b>
<p style="text-align: center;"><b>Bulk Stage I<sub>1</sub></b></p> <p>Maintain Current <math>\leq 30</math> A per 100 Ah C<sub>20</sub></p> <p>Typically, Constant Current, but Constant Power, or Taper Charge Permitted</p>	<p>End when voltage = 2.40 to 2.43 V/cell (20°C)            Max time (h) = 1.2 * DoD (Ah) / Avg. Current (A)</p>	<p>If Max time is exceeded: STOP</p>
<p style="text-align: center;"><b>Absorption Stage V<sub>1</sub></b></p> <p>Maintain Constant Terminal Voltage (Adjusting only for changing battery temperature)</p> <p>Voltage = 2.40 to 2.43 V/cell (20°C)</p>	<p>Without the optional accelerated finishing stage, maintain charge until current acceptance drops by less than 0.10 ampere over a 1 hour period            Max Time: 12h</p> <p>With optional accelerated finishing stage end when current = I<sub>2</sub>            Max Time: 6h</p>	<p>If Max time is exceeded: Goto next stage</p> <p>If Current exceeds 8 A after dropping below 6 A: STOP</p>
<p style="text-align: center;"><b>Optional Accelerated Finishing Stage I<sub>2</sub></b></p> <p>Maintain Constant Current:            1 to 2 A per 100 Ah C<sub>20</sub></p>	<p>Charge for 1 to 4 hours based on Ah accumulated in first two stages:  <math>&lt;25\%</math> of C<sub>20</sub> – 1 hour            25% to 50% of C<sub>20</sub> – 2 hours  <math>&gt;50\%</math> of C<sub>20</sub> – 4 hours</p>	<p>If Voltage exceeds 2.80 V/cell: Goto next stage</p>
<p style="text-align: center;"><b>Optional Float Stage V<sub>2</sub></b></p> <p>Maintain Constant Terminal Voltage (Adjusting only for changing battery temperature)</p> <p>Voltage = 2.25 V / cell (20°C)</p>	<p style="text-align: center;">No time limit</p> <p>This step is generally unneeded if (1) zero load is present when device is not in operation, and (2) device duty cycle does not include periods of non-use exceeding 3 months.</p>	

To compensate for battery temperature not at 20°C, subtract 0.005 V/cell for each 1°C above 20°C; add 0.005 V/cell for each 1°C under 20°C.

Applies to East Penn's 8A Line product.