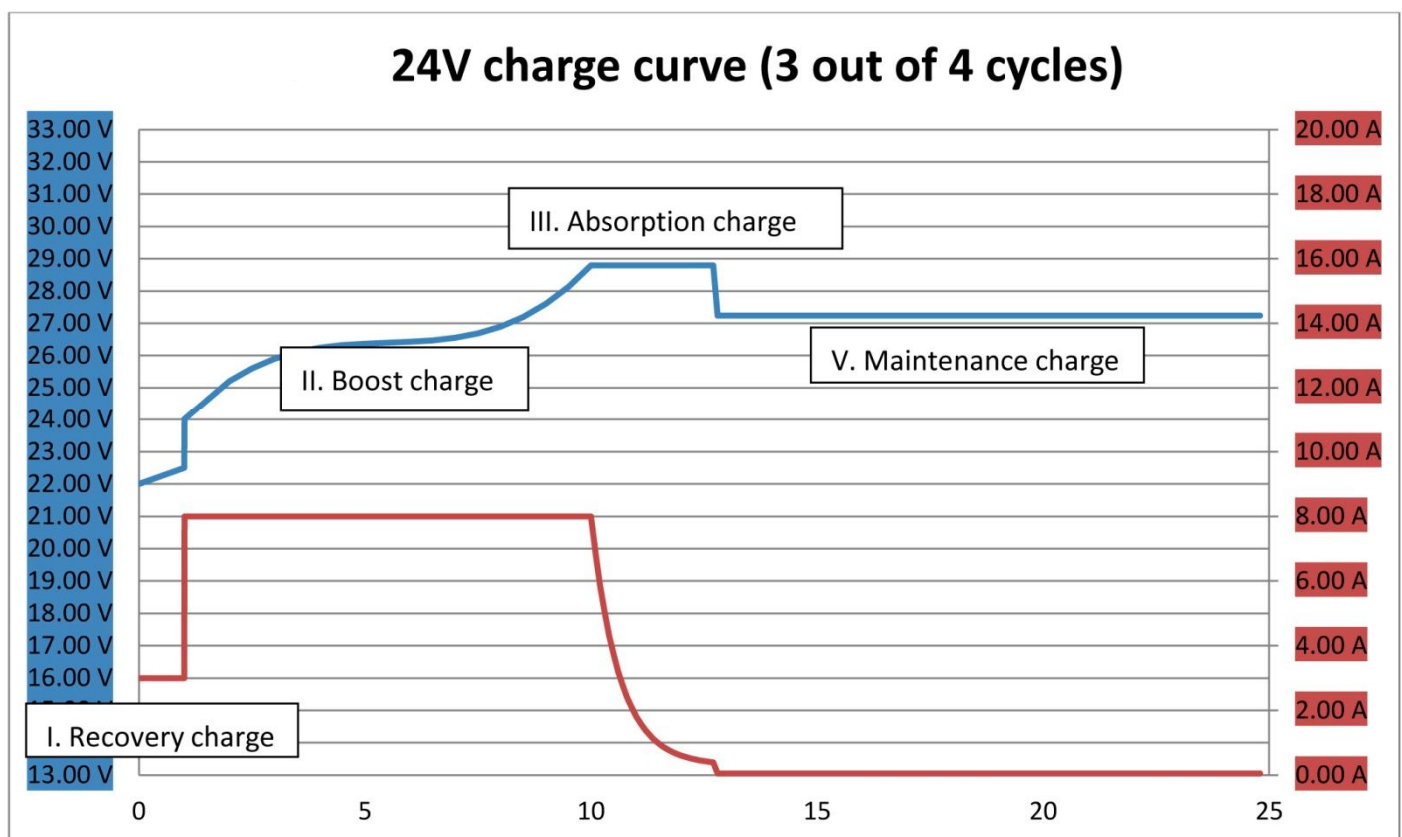


24V charge curve

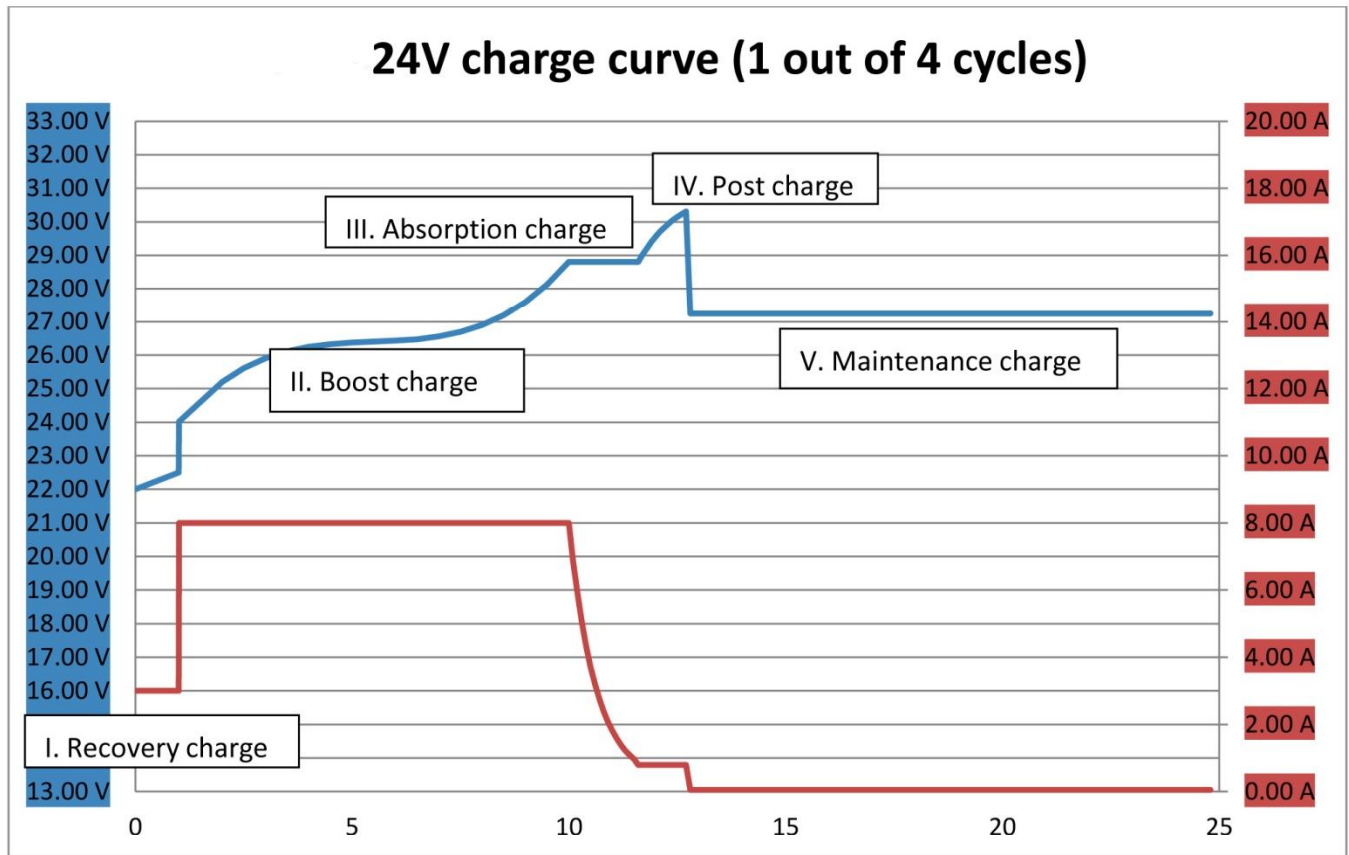
chargers charge curve consists of the following charge phases:

- I. Recovery charge: (only in case the start battery voltage is lower than 22.8 V): 2.3A/3A/4.5A (6/8/12), for 1 hour (fixed time)
- II. Boost charge: 6A/8A/12A (6/8/12) until 28.0V
- III. Absorption charge: current decreases and voltage increases to 28.8V
- IV. Only every fourth cycle: post charge: 0.6A/0.8A/1.0A (6/8/12) for 1..3 hours (dependant on boost charge phase)
- V. Maintenance charge: 27.2V for 12 hours
- VI. Trickle charge: 6 minutes per hour at 27.2V

In 3 out of 4 charge cycles an IU curve is performed.



In 1 out of 4 cycles an IUI curve is performed.



In combination with low post charge current, this very limits any possible water loss, due to possibly insufficient (hydrogen-oxygen) recombination at low temperatures.

Testing this charge curve shows, that battery capacity after the IU curve (3 out of 4 cycles) may decrease up to 1%. However after the IUI curve (1 out of 4 cycles) the battery capacity is completely restored.

The boost charge is only up to 28.0V. In case of battery imbalance (due to different temperature profiles), this prevents gassing of the battery with the highest voltage. However in order to fully charge the battery, the absorption voltage is 28.8V at low current.

This charge curve prevents both capacity loss and water loss.