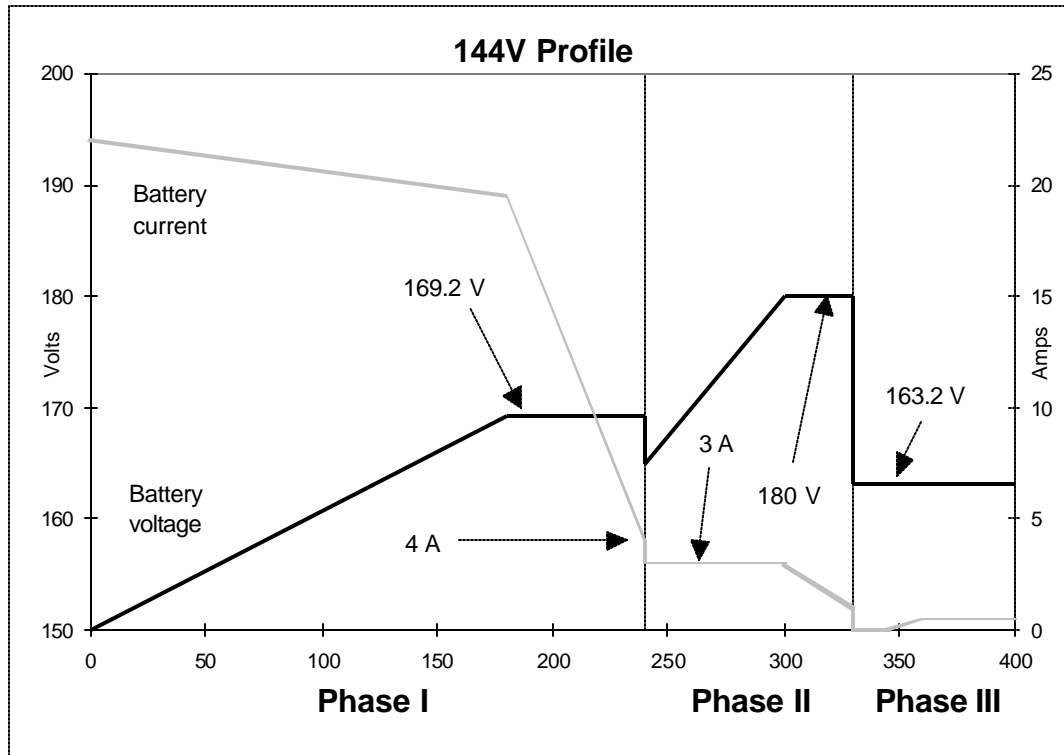


Solectria 144 V Charging Profile



All phases:

Temperature compensation is $-0.2\% / ^\circ\text{C}$. The zero compensation temperature is 30°C . The charger is disabled if the batteries reach 55°C . The maximum amp-hours for the whole charge are limited to 70 Ah for safety.

Phase I:

Phase I is the bulk charge. The charger will charge at maximum power until the battery reaches a maximum voltage of 169.2 V. When the battery current decreases below 4 A, Phase II will begin. During Phase I, LED1 will be lit.

Phase II:

Phase II is the overcharge. The charger will put out a maximum of 3 A and 180 V. During Phase II the charger will provide 12% of the amp-hours provided in Phase I, i.e. if the bulk charge provided 40 Ah, the overcharge will provide another 4.8 Ah. After the 12% has been provided, Phase III will begin. The maximum amp-hours provided in Phase II will be 8 Ah for safety. During Phase II, LED2 will be lit.

Phase III:

Phase III is an unlimited float. The charger will hold the battery at 163.2 V. The charger will be able to put out up to 10 A in this mode, in case the driver uses the heater to warm the car while the car is still plugged in. During Phase III, the Done LED will be lit.