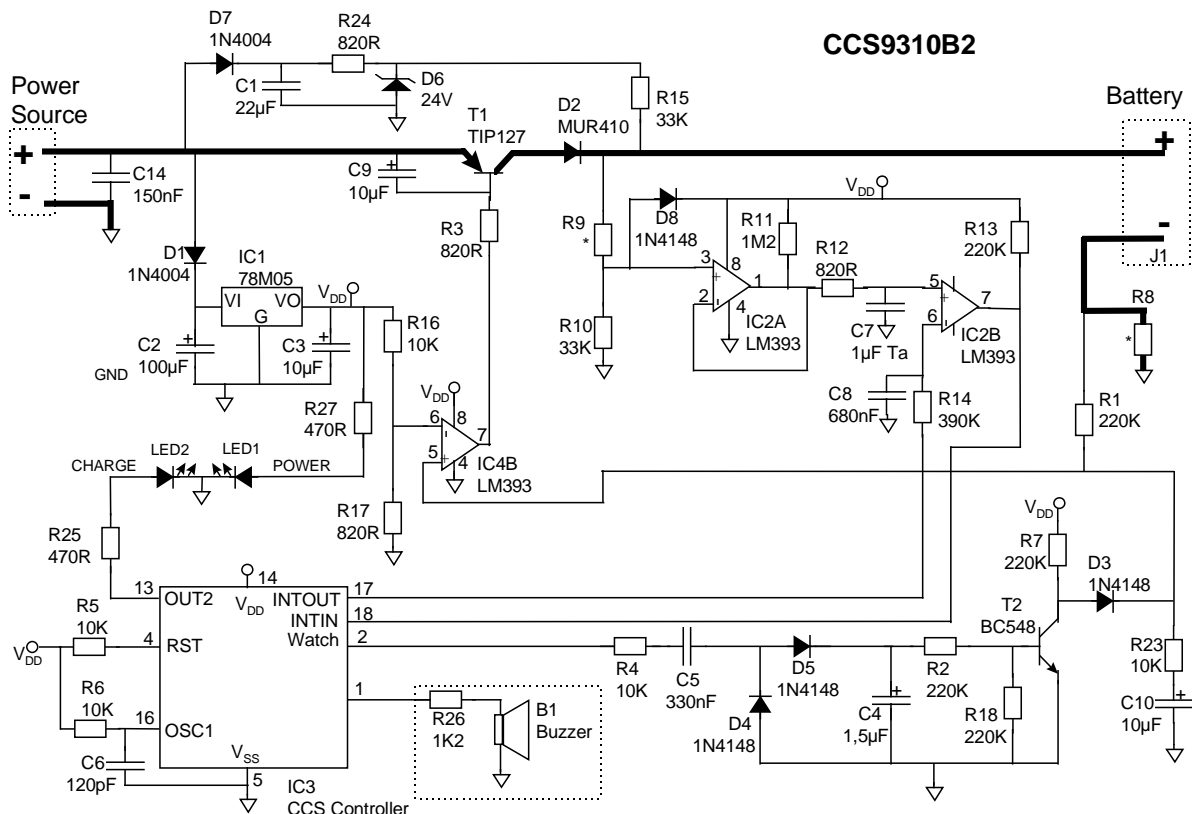*CCS*   **Typical Charger Circuit based on CCS Charge Controllers**

Schematic:

CCS9310B2

Power supply:

As supply voltage V_{in} use a rectified 50/60Hz AC voltage pulsating with a 100/120Hz frequency. Do not use a smoothing capacitor!

Calculation of transformer voltage: approx. 1.7V x nominal Battery Voltage

Battery voltage:

Resistor R9 determines the range of the battery voltage (unlimited number of cells).

Calculation of R9:

$$V_{nom} = 1,2 * \left(1 + \frac{R_9}{R_{10}}\right) \quad R_9 = R_{10} * \left(\frac{V_{nom}}{1,2} - 1\right)$$

Charge current:

The charge controller needs a current with pulsating waveform, e.g. rectified line with 100/120Hz frequency. Calculation of current: $I_{charge} = 0.38V / R8$

Comments: Our aim is to help you best in the design of superior chargers with CCS-technology. This Application Note was carefully composed. However, according to the wide range of solutions not all aspects and possibilities can be covered by this publication. Furthermore errors cannot be completely excluded and we do not provide any responsibility for the given applications. Therefore we welcome your response comments and suggestions for further improving our CCS-Application Notes. **Thank you!**