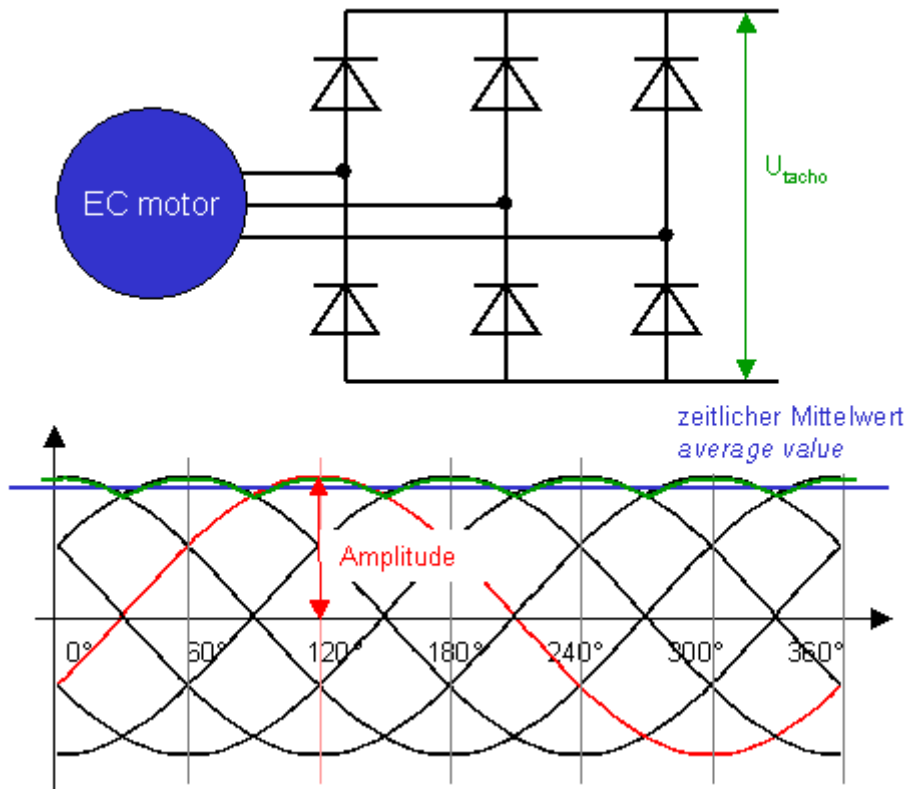If an EC motor is used as a generator a sine-shaped alternating voltage is produced between each two phases.

- The frequency is proportional to the speed.
- The amplitude of this induced voltage is also proportional to the speed and can be calculated with the speed and the speed constant k_n from the catalog.
- The formula is: $U_{amplitude} = (PI/3) * (n / k_n)$

If the EC motor is used to produce a DC voltage, the AC voltage must be rectified, e.g. with a circuit similar to the one in the diagram.

- The average value of the voltage is given by the speed and the speed constant from the catalog k_n.
- The formula is: $U_{average} = n / k_n$